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ABSTRACT

This report discusses the outcomes of a survey of 2-year and 4-year postsecondary education institutions (n=5,040) about students with disabilities. It includes information about enrollment of postsecondary students with disabilities and support services and accommodations. Results found: (1) an estimated 428,280 students with disabilities were enrolled at 2-year and 4-year postsecondary educational institutions in 1996-97 or 1997-98; (2) learning disability was the most frequent disability with almost half of the students with disabilities in this category; (3) 72 percent of the institutions enrolled students with disabilities; (4) almost all of the institutions that enrolled students with disabilities (98 percent) had provided at least one support service or accommodation, with most providing alternative examination formats or additional time; (5) public institutions were more likely than private institutions to have provided a service or accommodation; (6) almost all (95 percent) of the institutions provided at least one kind of educational material or activity for faculty and staff designed to assist them in working with students with disabilities; and (7) 28 percent of the institutions indicated that their counts of students with disabilities include only those students to whom services or accommodations were provided. Appendices include the survey questionnaire and tables of standard errors. (CR)

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Statistical Analysis Report

August 1999

An Institutional
Perspective on
Students with
Disabilities in
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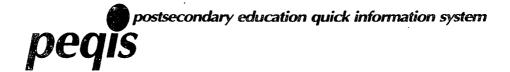


NATIONAL CENTER FOR EDUCATION STATISTICS

Statistical Analysis Report

August 1999

An Institutional Perspective on Students with Disabilities in Postsecondary Education



Laurie Lewis Elizabeth Farris Westat

Bernie Greene Project Officer National Center for Education Statistics

U.S. Department of Education
Office of Educational Research and Improvement

NCES 1999-046



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Executive Summary

Key legislation such as the Americans with Disabilities Act (ADA) and the Individuals with Disabilities Education Act (IDEA) has prompted numerous questions regarding access, support, and accommodations for students with disabilities in postsecondary education institutions. institutions are required by law to provide reasonable accommodations to students with disabilities to ensure equal access to educational opportunities for these students. However, there have been no nationally representative data available from postsecondary institutions about the enrollment of students with disabilities and the support services and accommodations these institutions provide to students with disabilities. Moreover, since no information has been available about the recordkeeping and reporting capabilities of postsecondary institutions regarding students with disabilities, it has been difficult to assess the extent to which postsecondary institutions can provide information about these students.

In response, this study, requested by the Office of Special Education and Rehabilitative Services (OSERS), U.S. Department of Education (ED). provides nationally representative data from 2-4-year postsecondary education and year institutions about students with disabilities. Specifically, the survey, undertaken by the National Center for Education Statistics (NCES) using the Postsecondary Education Quick Information System (PEQIS), includes information about (1) enrollments of postsecondary students with disabilities, (2) institutions enrolling students with disabilities, (3) support services and accommodations designed for students with disabilities, (4) education materials and activities designed to assist faculty and staff in working with students with disabilities, and (5) institutional records and reporting about students with disabilities. Information contained in this report is restricted to those students who had identified themselves in some way to the institution as having a disability, since these are the only

students about whom the institutions could report. Note that students who identify themselves to the institution as having a disability are a subset of all students with disabilities, since some students with disabilities may choose not to identify themselves to their institutions.

Key Findings

Number of Postsecondary Students with Disabilities

An estimated 428,280 students with disabilities were enrolled at 2-year and 4-year postsecondary education institutions in 1996-97 or 1997-98. Most of the students were enrolled at public 2year and public 4-year institutions, and at medium and large institutions. Learning disabilities was the most frequent disability, with almost half of the students with disabilities (195,870 out of 428,280 students) in this category. Institutions reported 59,650 students with mobility or orthopedic impairments, 49,570 students with health impairments or problems, and 33,260 students with mental illness or emotional disturbance. Institutions also reported 23,860 students with a hearing impairment, 18,650 students that were blind or visually impaired, and 4,020 students that had a speech or language impairment. The remaining 38,410 students were reported by the institutions in the "other, specify" category.

Institutions Enrolling Students with Disabilities

About three-quarters (72 percent) of the nation's 5,040 2-year and 4-year postsecondary education institutions enrolled students with disabilities in 1996-97 or 1997-98. Almost all (98 percent) public 2-year and public 4-year institutions enrolled students with disabilities, compared with 63 percent of private 4-year and 47 percent of



private 2-year institutions. Virtually all medium and large institutions (99 and 100 percent, respectively) enrolled students with disabilities, compared with 63 percent of small institutions.

Support Services and Accommodations for Students with Disabilities

Almost all (98 percent) of the institutions that enrolled students with disabilities in 1996-97 or 1997-98 had provided at least one support service or accommodation to a student with disabilities. Most institutions (88 percent) had provided alternative exam formats or additional time, and 77 percent provided tutors to assist with ongoing coursework. Readers, classroom notetakers, or scribes were provided by 69 percent of the institutions, and registration assistance or priority class registration were provided by 62 percent. Institutions also frequently provided adaptive equipment or technology, such as assistive listening devices or talking computers (58 percent), and textbooks on tape (55 percent). Sign language interpreters/transliterators were provided by 45 percent of the institutions, and course substitutions or waivers by 42 percent. Various other support services were provided by one-third or fewer of the institutions.

In general, public 2-year and 4-year institutions were more likely than private 2-year and 4-year institutions to have provided a service or accommodation, and medium and large institutions were more likely than small institutions to have provided a service or accommodation. Large institutions were also more likely than medium institutions to have provided many of the services.

Materials and Activities Designed for Working with Students with Disabilities

Almost all (95 percent) of the institutions that enrolled students with disabilities in 1996-97 or 1997-98 provided at least one kind of educational material or activity for faculty and staff designed to assist them in working with students with disabilities. Most of these institutions (92 percent) provided one-on-one discussions with

faculty and staff who request information and assistance, 63 percent provided workshops and presentations to faculty groups, 62 percent had information resources available for faculty and staff use, 41 percent had a faculty/staff handbook, and 32 percent did annual mailings to faculty and staff.

Records About Students with Disabilities

Twenty-eight percent of the institutions indicated that their counts of students with disabilities included only those students to whom services or accommodations were provided; 38 percent reported that their counts were based on students who provided verification of their disabilities, regardless of whether services or accommodations were provided; 22 percent included students who identified themselves to the disability support services office or coordinator, regardless of verification or provision of services; and 12 percent said that their counts were based on all students that had been reported to the disability support services office or coordinator, regardless of whether that office had any contact with them.

About three-quarters of the institutions indicated that their records currently contained information about level (undergraduate/graduate), and about two-thirds indicated that the records contained information about sex, age or date of birth, and major field of study/program. Attendance status (full or part time) was included by 59 percent of the institutions, race/ethnicity by 49 percent, and certificates or degrees awarded by 45 percent of the institutions. About a third of the institutions included information about whether a student receives financial aid. Information not currently contained in the records about students with disabilities could be added or merged to the records by almost all the institutions without the information on their records.

Half of the institutions reported that their records about students with disabilities are maintained only in paper files by the office or person responsible for providing support services to students with disabilities, and 20 percent indicated that the records are maintained in a separate computerized database by the disability



support services office or coordinator. Records are maintained in a computerized database as part of the general student record system and are accessible to various institutional offices at 13 percent of the institutions. They are part of the general student record system but accessible only to the disability support services office or coordinator at 8 percent of the institutions. Nine percent of the institutions reported that they maintained no formal records about students with disabilities.

Related Report

This PEQIS study complements another NCES report, Students with Disabilities in Postsecondary Education: A Profile of Preparation, Participation, and Outcomes. The report. released in June and also requested by OSERS. profiles students with disabilities, while this PEQIS report profiles postsecondary institutions. That is, the report released in June is based on student self-reports, while the PEQIS study is based on institutional reports. The report that profiles students with disabilities is based on an analysis of four different surveys conducted by NCES, which were used to address the following four issues: (1) enrollment in postsecondary education, (2) access to postsecondary education, (3) persistence to degree attainment, and (4) early labor market outcomes and graduate school enrollment rates of college graduates with disabilities.1



¹ Students with Disabilities in Postsecondary Education: A Profile of Preparation, Participation, and Outcomes can be accessed through the NCES web site (http://nces.ed.gov) or by calling 1-877-4ED-Pubs.

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1. BACKGROUND

The increased enrollment of persons with disabilities in postsecondary education, along with key legislation such as Section 504 of the Rehabilitation Act of 1973 (Section 504), the Americans with Disabilities Act (ADA), and the Individuals with Disabilities Education Act (IDEA), have prompted numerous questions regarding access, support, and accommodations postsecondary education However, while there have been a few self-report studies of various groups of postsecondary students with disabilities,2 there have been no nationally representative data available from postsecondary institutions about the enrollment of students with disabilities or the support services and accommodations they provide to these students. Moreover, since no information has been available about the recordkeeping and capabilities postsecondary of institutions regarding students with disabilities, it has been difficult to assess the extent to which postsecondary institutions can information about these students and the feasibility of regularly collecting information about students with disabilities from institutions.

The Office Special Education and Rehabilitative Services (OSERS). U.S. Department of Education (ED), requested this study on students with disabilities at postsecondary education institutions. It was designed to provide nationally representative data from postsecondary education institutions enrollments of students with disabilities, by specific disability category and the total with any disability. These are the first nationally representative data collected from institutions about these students. The study also obtained information regarding institutional records and reporting about students with disabilities,

including the duplicated or unduplicated nature of the specific and total counts, which students are represented in the counts, how records about students with disabilities are maintained by the institution, and what variables are contained on the records. OSERS will use this information to assess the feasibility of collecting information from institutions about students with disabilities as part of existing ED data collections, such as the Integrated Postsecondary Education Data System Additional questions asked about whether the institution provided special support services or accommodations designed for students with disabilities, institutional verification of disabilities, work with the state vocational rehabilitation agency, educational materials or activities designed to assist faculty and staff in working with students with disabilities, special outreach or recruitment materials designed specifically to recruit students with disabilities, and institutional planning for the purchase and implementation of new technologies.

Information contained in this report is restricted to those students who had identified themselves in some way to the institution as having a disability, since these are the only students about whom the institutions could report. Note that students who identify themselves to the institution as having a disability are a subset of all students with disabilities, since some students with disabilities may choose not to identify themselves to their institutions.

The following institutional characteristics were used as variables for analyzing the survey data:

- Type of institution: public 2-year, private 2year, public 4-year, private 4-year.
- Region: Northeast, Southeast, Central, and West.
- Size of institution: less than 3,000 students (small), 3,000 to 9,999 students (medium), and 10,000 or more students (large).

² See the NCES report Students with Disabilities in Postsecondary Education: A Profile of Preparation, Participation, and Outcomes (NCES 1999-187) for a discussion of some of these studies.



The analysis variables, particularly institutional type and size, are related to each other. example, virtually all (99.9 percent) private 2year and 89 percent of private 4-year institutions are small, compared with 57 percent of public 2year and 25 percent of public 4-year institutions. Among large institutions, 56 percent are public 4year and 34 percent are public 2-year institutions, compared with 11 percent private 4-year institutions and no private 2-year institutions (as estimated by this sample). Because of these relationships, differences on survey items tend to covary by these analysis variables. This report focuses on presenting the findings by institutional type and size, but the findings by region are presented in the tables for those interested in this variable.

The survey was conducted in spring of 1998 by the National Center for Education Statistics (NCES) using the Postsecondary Education Quick Information System (PEQIS). PEQIS is designed to collect limited amounts of policy-relevant information on a quick turn-around basis from a previously recruited, nationally representative sample of postsecondary institutions. PEQIS surveys are limited to three pages of questions with a response burden of about 30 minutes per respondent.³ The survey was mailed

to the PEOIS survey coordinators at 1,084 2-year and 4-year postsecondary education institutions. Coordinators were told that the survey was designed to be completed by the person or office most knowledgeable about students disabilities and the services provided to them by the institution. Institutions were asked to report for the 1996-97 12-month academic year if possible, but they could provide information for the current school year (1997-98) if information for 1996-97 was not available. The unweighted survey response rate was 91 percent; the weighted survey response rate was also 91 percent. Data were adjusted for questionnaire nonresponse and weighted to provide national estimates. Section 7 of this report provides a more detailed discussion of the sample and survey methodology. survey questionnaire is reproduced in appendix B.

All specific statements of comparisons made in this report have been tested for statistical significance through chi-square tests and *t*-tests adjusted for multiple comparisons using the Bonferroni adjustment and are significant at the 95 percent confidence level or better. However, not all statistically different comparisons have been presented, since some were judged to be not of substantive importance.

³ Additional information about PEQIS is presented in the methodology section of this report.



2. ENROLLMENT OF STUDENTS WITH DISABILITIES

This section provides information about the enrollment of students with disabilities at postsecondary education institutions. Information contained in this report is restricted to those students who had identified themselves in some way to the institution as having a disability, since these are the only students about whom the institutions could report. Institutions were also asked to indicate whether their counts of students with disabilities were unduplicated (i.e., counted only once, regardless of the number of disabilities) or duplicated and to indicate which students were represented in the counts. Information about verification disabilities was also obtained.

Institutions Enrolling Students with Disabilities

About three-quarters (72 percent) of the nation's 5,040 2-year and 4-year postsecondary education institutions enrolled students with disabilities in 1996-97 or 1997-98 (table 1). This represents 3,630 institutions. Almost all (98 percent) public 2-year and public 4-year institutions enrolled students with disabilities, compared with 63 percent of private 4-year and 47 percent of private 2-year institutions. Virtually all medium and large institutions (99 and 100 percent, respectively) enrolled students with disabilities, compared with 63 percent of small institutions.

Table 1.—Number of 2-year and 4-year postsecondary education institutions, and number and percent that enrolled students with disabilities in 1996-97 or 1997-98, by institutional characteristics

	characteristics							
Institutional	Total	otal Institutions enrolling						
characteristic	number of	students with disabilities						
Characteristic	institutions	Number	Percent					
All institutions	5,040	3,630	72					
Institutional type								
Public 2-year	1,240	1,220	98					
Private 2-year	1,140	530	47					
Public 4-year	610	590	98					
Private 4-year	2,060	1,290	63					
Geographic region								
Northeast	1,210	790	66					
Southeast	1,230	1,030	83					
Central	1,290	860	67					
West	1,310	960	73					
Size of institution		•						
Less than 3,000	3,830	2,430	63					
3,000 to 9,999	810	800	99					
10,000 or more	400	400	100					

NOTE: Information about students with disabilities represents only those students who identified themselves to their institution as having a disability, since these are the only students about whom the institutions could report. The numbers of institutions have been rounded to the nearest 10. Numbers may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.



Sixty percent of institutions enrolled students with specific learning disabilities, and 56 percent enrolled students with mobility or orthopedic impairments (table 2). Many institutions also enrolled students with hearing impairments (48 percent),⁴ who were blind or visually impaired (46 percent), who had health impairments or problems (45 percent), or who reported a mental illness or emotional disturbance (39 percent). About a fifth of the institutions enrolled students with speech or language impairments (18 percent), or who specified some

other disability (21 percent). For each of the disability categories, public 2-year and public 4-year institutions were much more likely than private 2-year and private 4-year institutions to enroll students with the disability; for most of the disability categories, private 4-year institutions were more likely than private 2-year institutions to enroll students with the disability. Medium and large institutions were much more likely to enroll students in each of the disability categories than were small institutions.

Table 2.—Percent of 2-year and 4-year postsecondary institutions that enrolled any students in each disability category in 1996-97 or 1997-98, by institutional characteristics

Institutional characteristic	Hearing impairment	Blind or visual impairment	Speech or language impairment	Mobility/ orthopedic impairment	Specific learning disabilities	Health impairment/ problem	Mental illness/ emotional disturbance	Other
All institutions	48	46	18	56	60	45	39	21
Institutional type								
Public 2-year	83	79	39	86	90	77	72	48
Private 2-year		13	3	27	22	19	11	4
Public 4-year	91	85	37	94	96	86	74	42
Private 4-year	33	34	8	43	54	27	25	9
Geographic region								
Northeast	49	44	15	55	56	43	35	22
Southeast	52	53	17	61	69	50	46	21
Central	45	43	20	47	61	40	35	16
West	47	44	21	60	55	45	. 40	24
Size of institution								
Less than 3,000	33	32	9	43	48	31	25	11
3,000 to 9,999	93	90	46	94	98	86	82	. 44
10,000 or more	100	*100	54	99	*100	93	91	68

^{*}Rounds to 100 percent for presentation in the table.

NOTE: Information about students with disabilities represents only those students who identified themselves to their institution as having a disability, since these are the only students about whom the institutions could report.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.

⁴ The percent of institutions that reported enrolling students with hearing impairments in this survey for 1996-97 or 1997-98 (48 percent) is approximately the same as the percent of institutions that reported in a previous PEQIS survey that they enrolled deaf or hard of hearing students in any (one or more) of the years 1989-90 through 1992-93 (47 percent). See *Deaf and Hard of Hearing Students in Postsecondary Education*, 1994 (NCES 94-394) for the results of the PEQIS survey on deaf and hard of hearing students.



The other disability categories shown in table 3 were created from the responses that institutions provided in the "other, specify" category on the questionnaire (used by 21 percent of institutions). Thus, the percentage of institutions actually enrolling students with these other disabilities may be higher than shown in table 3, since some institutions may have included students with these disabilities in the other categories listed on the questionnaire. Disabilities frequently mentioned by institutions for which categories were created include brain injury (traumatic or acquired brain injury, head injury), developmental disability (e.g., mental retardation, autism), neurological impairment (e.g., seizures, epilepsy, Tourette's Syndrome, cerebral palsy), and substance abuse. Some institutions counted students with multiple disabilities in the "other, specify" category, and a few institutions counted students with temporary disabilities here, particularly if those disabilities required support services or accommodations. In addition, some institutions did not know the specific disabilities of all or some of the students that they included in their counts of students with disabilities.

Table 3.—Percent of 2-year and 4-year postsecondary education institutions that indicated that they enrolled students with specific other disabilities in 1996-97 or 1997-98

Disability	Percent
Brain injury	9
Developmental disability	4
Neurological impairment	2
Substance abuse	2
Multiple disabilities	3
Temporary disabilities	1
Specific disability unknown	5
Other	3

NOTE: The disability categories were created from the "other, specify" item contained in the disability question (question 2). Thus, the percentage of institutions enrolling students with these other disabilities may be higher than shown, since some institutions may have included students with these disabilities in the other categories listed on the questionnaire. Information about students with disabilities represents only those students who identified themselves to their institution as having a disability, since these are the only students about whom the institutions could report.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.

Number of Postsecondary Students with Disabilities

An estimated 428,280 students with disabilities were enrolled at 2-year and 4-year postsecondary education institutions in 1996-97 or 1997-98 (table 4).⁵ Consistent with the distributions of the percentage of institutions that enrolled students with disabilities, most of the students with disabilities were enrolled at public 2-year and public 4-year institutions, and at medium and large institutions.⁶

Specific learning disabilities was the most frequent disability, with almost half of the students with disabilities (195,870 out of 428,280 students) in this category (table 4).⁷ Institutions reported 59,650 students with mobility or



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⁵ The number of students with disabilities represents only those students who had identified themselves in some way to the institution as having a disability, since these are the only students about whom the institutions could report. To put this number into context, the National Center for Education Statistics estimates that there were 14.6 million students enrolled in 2-year and 4-year postsecondary education institutions in fall 1996 (U.S. Department of Education, 1999, Table 170). This means that about 3 percent of the students enrolled at 2-year and 4-year postsecondary education institutions identified themselves to their institution as having a disability. Estimates produced from student self-reports are somewhat different. NCES estimates that 5 percent of undergraduate students and 3 percent of graduate and firstprofessional students enrolled in postsecondary institutions had self-reported disabilities in 1995-96 (U.S. Department of Education, 1999, Table 211).

⁶ In addition, more students with disabilities were enrolled in institutions located in the West than in the other regions. Students with disabilities enrolled at institutions in the West represent 39 percent of the total number of students with any disability (165,340 out of 428,280). However, institutions in the West also enrolled a high proportion of all students in postsecondary education (32 percent; see table 6).

⁷ It is interesting to note that the number of students with specific learning disabilities represents different percentages of the total number of students with disabilities reported by the various types of institutions. Thus, while students with specific learning disabilities represent 46 percent of the total number of students with any disability reported by all institutions (195,870 out of 428,280), the percentage with specific learning disabilities is 38 percent of the total at public 2-year institutions (86,750 out of 230,170), 44 percent at private 2-year institutions (2,380 out of 5,440), 51 percent at public 4-year institutions (71,160 out of 138,860), and 66 percent at private 4-year institutions (35,580 out of 53,810).

Table 4.—Number of students in each disability category and total with any disability enrolled at 2year and 4-year postsecondary education institutions in 1996-97 or 1997-98, by institutional characteristics

Institutional characteristic	otal with any lisability	Hearing impairment	Blind or visual impairment	Speech or language impairment	Mobility/ orthopedic impairment	Specific learning disabilities	Health impairment/ problem	Mental illness/ emotional disturbance	Other
All institutions 4	28,280	23,860	18,650	4,020	59,650	195,870	49,570	33,260	38,410
Institutional type									
Public 2-year 2	30,170	12,680	9,480	2,730	35,650	86,750	29,090	20,430	28,680
Private 2-year	5,440	320	200	50	750	2,380	1,000	400	330
Public 4-year 1	38,860	6,440	7,060	920	20,280	71,160	15,450	9,680	7,930
Private 4-year	53,810	4,430	1,910	320	2,970	35,580	4,030	2,750	1,470
Geographic region		•							
Northeast	86,940	5,650	2,940	680	7,580	48,490	12,080	5,530	3,960
Southeast	84,220	5,380	4,270	670	11,680	40,920	9,990	5,980	5,250
Central	91,770	4,720	4,180	760	10,910	40,610	10,250	7,680	9,220
West 1	65,340	8,120	7,260	1,910	29,470	65,850	17,250	14,070	19,980
Size of institution									
Less than 3,000	75,930	5,840	3,540	840	10,050	36,500	8,780	5,090	3,960
3,000 to 9,999 1	49,130	6,460	5,410	1,320	18,320	68,970	18,370	11,570	13,890
10,000 or more 2	03,210	11,560	9,700	1,860	31,280	90,390	22,420	16,590	20,560

NOTE: Information about students with disabilities represents only those students who identified themselves to their institution as having a disability, since these are the only students about whom the institutions could report. The numbers of students have been rounded to the nearest 10. Numbers may not sum to totals because of rounding. In addition, the specific disabilities do not sum to the total with any disabilities because of missing data and duplicated counts by specific disabilities. Weighted item nonresponse rates for the specific disabilities ranged from 1.9 to 3.0 percent, and for the total with any disability was 0.2 percent. About 3 percent of institutions kept duplicated counts of students by specific disabilities (i.e., each student with a disability was counted by each disability he or she had or each disability for which services were provided), but kept an unduplicated count of the total number of students with disabilities (i.e., each student with any disability was counted in the total only once, regardless of the number of disabilities he or she had).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.

orthopedic impairments, 49,570 students with health impairments or problems, and 33,260 students with mental illness or emotional disturbance. Institutions also reported 23,860 students with a hearing impairment, 18,650 students who were blind or visually impaired, and 4,020 students who had a speech or language impairment. The remaining 38,410 students were

reported by the institutions in the "other, specify" category.9



The previous PEQIS survey on deaf and hard of hearing students found an estimated 20,040 students who identified themselves to the institution as deaf or hard of hearing enrolled in 2-year and 4-year postsecondary education institutions in 1992-93.

The number of students in the specific disabilities categories do not sum to the total number of students with any disability because of missing data and duplicated counts by specific disabilities. Weighted item nonresponse rates for the specific disabilities ranged from 1.9 to 3.0 percent, and for the total with any disability was 0.2 percent. About 3 percent of institutions kept duplicated counts of students by specific disabilities (i.e., each student with a disability was counted by each disability he or she had or each disability for which services were provided), but kept an unduplicated count of the total number of students with disabilities (i.e., each student with any disability was counted in the total only once, regardless of the number of disabilities he or she had).

Table 5.—Number of students with specific other disabilities enrolled at 2-year and 4-year postsecondary education institutions in 1996-97 or 1997-98, by institutional characteristics

	acter in the							
Institutional characteristic	Brain injury	Develop- mental disability	Neuro- logical impairment	Substance abuse	Multiple disabilities	Temporary disabilities	Specific disability unknown	Other
All institutions	6,190	6,020	740	990	3,820	900	13,030	6,720
Institutional type								
Public 2-year	4,730	5,960	350	740	3,000	50	10,930	2,930
Private 2-year	10	0	0	10	0	0	310	0
Public 4-year	1,250	50	320	240	800	760	1,180	3,330
Private 4-year	200	10	70	10	20	100	610	450
Geographic region								
Northeast	630	50	80	390	1,410	100	910	670
Southeast	460	150	220	170	700	230	2,000	1,320
Central	620	520	100	100	1,430	210	5,440	800
West	4,490	5,300	340	340	540	370	4,690	3,920
Size of institution								
Less than 3,000	610	500	50	40	440	0	1,920	410
3,000 to 9,999	1,840	2,230	300	430	1,850	160	5,780	1,320
10,000 or more	3,740	3,290	390	530	1,540	750	5,340	4,990

NOTE: The disability categories were created from the "other, specify" item contained in the disability question (question 2).). Thus, the number of students with these other disabilities may be higher than shown, since some institutions may have included students with these disabilities in the other categories listed on the questionnaire. Information about students with disabilities represents only those students who identified themselves to their institution as having a disability, since these are the only students about whom the institutions could report. The numbers of students have been rounded to the nearest 10. Numbers may not sum to totals because of rounding. Zeros indicate that no institution in the sample gave the indicated response.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.

Table 5 shows the number of students reported by institutions in the disability categories created from the "other, specify" category on the questionnaire. Of the 38,410 students reported in the "other, specify" category, institutions indicated that the specific disability was unknown for 13,030 students; most of these students (10,930 out of 13,030) were enrolled at public 2-year institutions. Institutions also reported sizable numbers of students with developmental disabilities (6,020) and brain injury (6,190). Most of these students, particularly those with developmental disabilities, were reported by public 2-year institutions.

Table 6 shows the percentage distributions of all students enrolled at 2-year and 4-year postsecondary institutions and of students at these institutions who identified themselves to the institution as having a disability, presented by institutional characteristics. The distributions by institutional type are quite different, particularly for public 2-year institutions. While 37 percent of all students enrolled at these postsecondary institutions were enrolled at public 2-year institutions, 54 percent of students who identified themselves to the institution as having a disability attended a public 2-year institution. Thus, a much higher proportion of students with disabilities than of all students attended public 2-year institutions.¹⁰



^{.10} The NCES report Students with Disabilities in Postsecondary Education: A Profile of Preparation, Participation, and Outcomes (NCES 1999-187) also reports that half of postsecondary students who self-reported having a disability in 1995-96 were enrolled at public 2-year institutions.

Table 6.—Percentage distributions of all students enrolled at 2-year and 4-year postsecondary education institutions, and of students who identified themselves to the institution as having a disability in 1996-97 or 1997-98, by institutional characteristics

Institutional characteristic	All students	Students who identified themselves to the institution as having a disability	
All institutions	100	100	
Institutional type			
Public 2-year	37	54	
Private 2-year	2	1	
Public 4-year	41	32	
Private 4-year	20	13	
Geographic region			
Northeast	21	20	
Southeast	23	20	
Central	24	21	
West	32	39	
Size of institution			
Less than 3,000	20	18	
3,000 to 9,999	32	35	
10,000 or more	49	47	

NOTE: Information about students with disabilities represents only those students who identified themselves to their institution as having a disability, since these are the only students about whom the institutions could report. Percents are calculated within each classification variable, but may not sum to 100 because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions. 1998.

Type of Counts Reported about Students with Disabilities

Institutions were asked to indicate whether the counts of students they provided by specific disabilities were unduplicated or duplicated. With unduplicated counts, each student with a disability is counted only once; that is, students are counted by their only or their primary disability. With duplicated counts, each student

with a disability is counted by each disability he or she has or each disability for which services are provided; that is, students with multiple disabilities are counted multiple times. example, if a student is both deaf and has diabetes, an institution reporting unduplicated counts would report this student in only one category; that is, the student would be counted as either hearing impaired or having a health impairment/problem. 11 An institution reporting duplicated counts would report this student in both categories. Most institutions (88 percent) reported unduplicated counts of students by disabilities. specific 10 percent reported duplicated counts, and 2 percent of the institutions could not report any information about the specific disabilities of their students (table 7). There was little variation by institutional type and size in the type of counts provided for specific disability categories. The only statistically significant difference was between public and private 2-year institutions, with private 2-year institutions more often providing unduplicated counts than public 2-year institutions.

Institutions were also asked to indicate whether the count of the total number of students with disabilities that they provided was unduplicated or duplicated. With an unduplicated total, each student with any disability is counted in the total only once, regardless of the number of disabilities he or she has. A duplicated total is the duplicated sum of the number of disabilities; that is, students with more than one disability are counted for each disability they have or each disability for which services are provided. Thus, an unduplicated total represents the number of students with disabilities, while a duplicated total represents the number of disabilities. An institution could keep duplicated counts by specific disability, yet keep an unduplicated count of the total number of students with any disability; a few institutions (about 3 percent) did keep their counts in this way (not shown in tables). Most institutions



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¹¹Some institutions that reported unduplicated counts of students also reported an additional category of "multiple disabilities" and reported students with more than one disability in this category rather than by their primary disability.

Table 7.—Percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities in 1996-97 or 1997-98 according to the type of count of the number of students by specific disability categories and the total number of students with disabilities, by institutional characteristics

Institutional characteristic		unt of the number of	Type of count of the total number of students with disabilities		
	Unduplicated	Duplicated	Other*	Unduplicated	Duplicated
All institutions	88	10	2	92	8
Institutional type					
Public 2-year	85	12	3	90	10
Private 2-year	96	4	(+)	96	4
Public 4-year	86	14	1	91	9
Private 4-year	89	9	2	94	6
Geographic region					
Northeast	90	10	(+)	93	7
Southeast	89	10	1	92	8
Central	88	10	2	91	9
West	87	10	4	93	7
Size of institution					
Less than 3,000	90	8	2	94	6
3,000 to 9,999	84	14	2	89	11
10.000 or more	84	14	2	90	10

^{*}Counts by specific disability categories are unknown.

NOTE: Percents are based on institutions that enrolled students with disabilities in 1996-97 or 1997-98. Information about students with disabilities represents only those students who identified themselves to their institution as having a disability, since these are the only students about whom the institutions could report. Percents may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.

(92 percent) reported an unduplicated count of the total number of students with disabilities (table 7). There was no statistically significant variation by institutional type or size in the type of counts provided for the total number of students with disabilities.

Basis for the Counts of Students with Disabilities

Institutions were asked to indicate which students with disabilities were represented in the counts they provided. Discussions with institutions during the survey development process indicated that institutions begin to include students with disabilities in their counts at different stages in

identification/verification/service process. Some institutions only count students to whom they provide services or accommodations, while some count all students that provide verification of their disabilities, regardless of whether services or accommodations are actually provided. Other institutions begin to include students in their counts as soon as students identify themselves to disability support services office coordinator, regardless of whether disabilities are verified or services or accommodations are provided. Some institutions include any students in their counts that have been reported to the disability support services office or coordinator as having identified themselves as having a disability, regardless of whether the disability



⁽⁺⁾ Less than 0.5 percent.

Table 8.—Percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities in 1996-97 or 1997-98 indicating the basis for their counts of students with disabilities, by institutional characteristics

Institutional characteristic	Only students to whom services/ accommodations were provided	Students that provided verification of their disabilities, regardless of whether services/ accommodations were provided	Students that identified themselves to your office as having a disability, regardless of whether disabilities were verified or services/ accommodations were provided	Students that have been reported to your office as having identified themselves as having a disability, regardless of whether your office had any contact with them
All institutions	28	38	22	12
Institutional type				
Public 2-year	31	32	24	13
Private 2-year	26	23	30	21
Public 4-year	26	59	11	5
Private 4-year	28	40	21	11
Geographic region				
Northeast	25	40	21	14
Southeast	26	39	24	11
Central	27	43	21	9
West	34	31	21	15
Size of institution				
Less than 3,000	27	33	25	15
3,000 to 9,999	28	46	19	· 7
10,000 or more	34	51	9	6

NOTE: Percents are based on institutions that enrolled students with disabilities in 1996-97 or 1997-98. Information about students with disabilities represents only those students who identified themselves to their institution as having a disability, since these are the only students about whom the institutions could report. Percents may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.

support services office or coordinator has any contact with them. This includes information provided to the disability support services office or coordinator by other offices at the institution, such as the registrar's office, even if the disability support services office or coordinator has no contact with them. This may occur after a student has been admitted and checks a box on a registration form indicating that he or she has a disability, but then does not seek any information, services, or accommodations from the institution.

Twenty-eight percent of the institutions indicated that their counts of students with disabilities included only those students to whom services or accommodations were provided; 38 percent reported that their counts were based on students who provided verification of their disabilities, regardless of whether services or accommodations were provided; 22 percent included students who identified themselves to the disability support services office or coordinator, regardless of verification or provision of services; and 12 percent said that their counts were based on all students that had been reported to the disability support services office or coordinator, regardless of whether that office had any contact with them (table 8). The basis for the counts showed some variation by institutional type and size. For example, public 4-year institutions were more



likely than the other types of institutions, and private 4-year institutions were more likely than private 2-year institutions, to indicate that their counts were based on students who provided verification; medium and large institutions were more likely than small institutions to indicate that this was the basis for their counts.

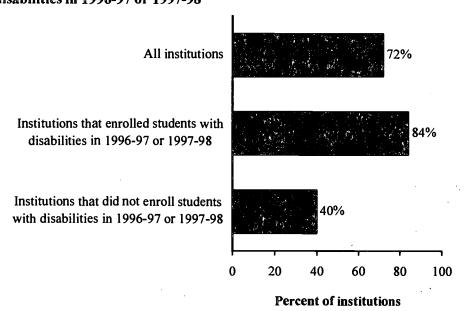
Verification of Student Disabilities

All institutions, including those that did not enroll any students with disabilities in 1996-97 or 1997-98, were asked about the requirement for verification of student disabilities, and what was accepted as verification. Under Section 504 and the ADA, postsecondary institutions may require adequate documentation of a disability and the need for accommodations, and once obtained, must accommodate the individual to the extent required by the law. About three-quarters

(72 percent) of all institutions required verification of student disabilities (figure 1). However, verification was required more frequently by institutions that enrolled students with disabilities in 1996-97 or 1997-98 than by institutions that did not enroll students with disabilities during that time: 84 percent compared with 40 percent.

Among the institutions that enrolled students with disabilities in 1996-97 or 1997-98, there was some variation by institutional type and size in whether verification of student disabilities was required (table 9). Almost all public 4-year and medium and large institutions that enrolled students with disabilities required verification of disabilities. Public 2-year and private 4-year institutions were also quite likely to require verification.

Figure 1.—Percent of 2-year and 4-year postsecondary education institutions that require verification of student disabilities, by whether the institution enrolled students with disabilities in 1996-97 or 1997-98



NOTE: Information about students with disabilities represents only those students who identified themselves to their institution as having a disability, since these are the only students about whom the institutions could report.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.



Table 9.—Percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities in 1996-97 or 1997-98 that require verification of student disabilities, and what those institutions accept as verification, by institutional characteristics

				Accepted as	verification ¹		
Institutional characteristic	Require verification	Medical evaluation/ statement	Psychological evaluation/ statement	Vocational rehabilitation agency evaluation	Testing or formal evaluation by your institution's disability support services office or coordinator	Informal evaluation or determination by your institution's disability support services office or coordinator	Other
All institutions	84	94	92	77	22	23	14
Institutional type							
Public 2-year	89	93	93	87	29	30	18
Private 2-year	59	78	64	76	13	21	11
Public 4-year	99	99	100	83	26	19	11
Private 4-year	84	98	96	64	16	17	13
Geographic region							
Northeast	88	95	95	70	16	22	18
Southeast	85	93	92	77	18	23	9
Central	86	93	91	80	27	18	14
West	80	96	91	79	30	28	17
Size of institution							
Less than 3,000	78	91	88	73	18	. 23	15
3,000 to 9,999	98	98	99	84	29	23	14
10,000 or more	98	100	² 100	78	32	22	14

¹Based on those institutions that require verification of student disabilities.

NOTE: Percents are based on institutions that enrolled students with disabilities in 1996-97 or 1997-98. Information about students with disabilities represents only those students who identified themselves to their institution as having a disability, since these are the only students about whom the institutions could report.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.

Most institutions that enrolled students with disabilities and required verification accepted a medical evaluation/statement or a psychological evaluation/statement as verification; about three-quarters accepted a vocational rehabilitation agency evaluation (table 9). About a quarter of the institutions indicated that testing or formal evaluation by the institution's disability support services office or coordinator was accepted, and about a quarter indicated that they accepted an informal evaluation or determination by the institution's disability support services office or

coordinator as verification. There was some variation by institutional type and size in what was accepted as verification of student disabilities. For example, private 4-year institutions were less likely than public 2-year and 4-year institutions to accept a vocational rehabilitation agency evaluation, and public 2-year and 4-year institutions, and medium and large institutions, were more likely than private 4-year and small institutions to accept testing or formal evaluation by the institution's disability support services office or coordinator.



²Rounds to 100 percent for presentation in the table.

3. SUPPORT SERVICES OR ACCOMMODATIONS DESIGNED FOR STUDENTS WITH DISABILITIES

This section provides information about the provision of special support services or accommodations designed for students with disabilities. Postsecondary institutions subject to Section 504 and the ADA are prohibited from discriminating on the basis of disability and must provide program modifications and auxiliary aids to students with disabilities to the extent required by law. Institutions that enrolled any students with disabilities in 1996-97 or 1997-98 were asked whether the institution had provided various support services or accommodations to a student with disabilities during that time. Information was obtained only about whether a service or accommodation was provided, and not about whether it was requested, since institutions keep records about service delivery but not about service requests. Thus, an institution may not have provided a service because either no student requested it or there was inadequate documentation to support it, rather than because the institution was unable or unwilling to provide the service.¹² Information was also obtained about whether the institution worked, either formally or informally, with the state vocational rehabilitation agency, and whether the formal planning process for the purchase and implementation of new technologies explicitly considers the needs of students with disabilities.

Provision of Support Services or Accommodations

Almost all (98 percent) of the institutions that enrolled students with disabilities had provided at least one support service or accommodation to a student with disabilities (not shown in tables). Most institutions (88 percent) had provided alternative exam formats or additional time, and 77 percent provided tutors to assist with ongoing coursework (table 10). Readers, classroom notetakers, or scribes were provided by 69 percent of the institutions, and registration assistance or priority class registration were provided by 62 percent. Institutions also frequently provided adaptive equipment or technology, such as assistive listening devices or talking computers (58 percent), and textbooks on tape (55 percent). Sign language interpreters/ transliterators were provided by 45 percent of the institutions, and course substitutions or waivers by 42 percent. One-third or fewer of the institutions provided the remaining support services or accommodations.

Whether various support services or accommodations were provided varied substantially by institutional type and size (table 10). The general pattern was that public 2-year and 4-year institutions were more likely than private 2-year and 4-year institutions to have provided a service or accommodation, and medium and large institutions were more likely than small institutions to have provided a service or accommodation. Large institutions were also more likely than medium institutions to have provided many of the services. This pattern of service provision is consistent with the distributions of enrollments of students with disabilities.



¹²It also is not possible from these data to ascertain the quality of the support services that were provided. For example, it would be useful to know if the sign language interpreters were certified and the adaptive equipment and technology was up-to-date and in good working order. However, the constraints of a brief PEQIS survey did not allow this kind of detailed information to be collected.

Table 10.—Percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities that provided various services or accommodations to students with disabilities during 1996-97 or 1997-98, by institutional characteristics

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Institutional characteristic	Sign language interpreters/ trans- literators	Oral interpreters/ trans- literators	Adaptive equipment and technology	Readers, classroom notetakers, or scribes	Paratransit for on- campus mobility	Personal attendants	Independent living skills training	Textbooks on tape	Tutors to assist with ongoing coursework
All institutions	45	22	58	69	13	10	5	55	77
Institutional type									
Public 2-year	. 66	33	81	82	12	. 11	10	66	87
Private 2-year	,10	(+)	30	18	3	9	(+)	11	51
Public 4-year	. 68	39	80	93	31	9	` 6	85	82
Private 4-year	. 29	14	39	66	11	9 .	1	49	75
Geographic region									
Northeast	40	17	59	78	13	7	2	59	84
Southeast	. 39	21	56	60	12	9	6	46	72
Central		21	57	76	11	14	4	62	83
West	51	29	61	64	17	8	7	55	70
Size of institution									
Less than 3,000	. 28	12	43	55	6	11	4	40	71
3,000 to 9,999		. 37	86	93	22	7	6	82	90
10,000 or more	96	56	97	*100	41	8	10	93	84

Table 10.—Percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities that provided various services or accommodations to students with disabilities during 1996-97 or 1997-98, by institutional characteristics—continued

Institutional characteristic	Alternative exam formats or additional time	Course substitution or waiver	Adaptive physical education courses or sports	Registration assistance or priority class registration	Special orientation	Disability resource handbook	Special career or placement services targeted for disabled students	Disability benefits counseling	Other
All institutions	88	42	21	62	32	24	22	33	19
Institutional type									•-
Public 2-year	94	48	26	77	46	35	32	51	17
Private 2-year		15	4	26	16	5	10	19	11
Public 4-year		69	42	83	46	47	34	43	26
Private 4-year		35	14	53	19	10	10	16	20
Geographic region								•	
Northeast	93	50	18	64	37	23	21	30	25
Southeast		46	22	64	29	22	24	42	14
Central	91	37	17	58	31	24	20	28	19
West	82	36	27	61	32	26	20	29	18
Size of institution									
Less than 3,000	82	29	13	48	21	11	13	26	16
3,000 to 9,999		61	30	- 88	48	39	32	45	21
10,000 or more		81	56	95	66	68	51	49	30

⁽⁺⁾ Less than 0.5 percent.

NOTE: Percents are based on institutions that enrolled students with disabilities in 1996-97 or 1997-98. Information about students with disabilities represents only those students who identified themselves to their institution as having a disability, since these are the only students about whom the institutions could report. The accommodations listed in the table are not the only accommodations a student may need.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.



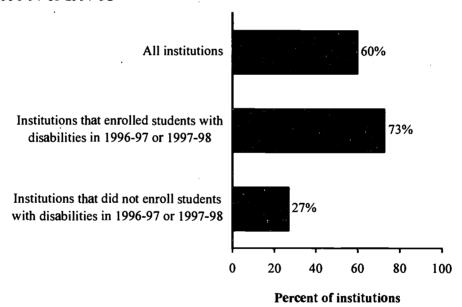
^{*}Rounds to 100 percent for presentation in the table.

Working with the State Vocational Rehabilitation Agency

All institutions, including those that did not enroll any students with disabilities in 1996-97 or 1997-98, were asked whether the person or office responsible for providing support services to students with disabilities worked, either formally or informally, with the state vocational rehabilitation agency regarding students with disabilities. Sixty percent of all institutions indicated that they worked with the state vocational rehabilitation agency (figure 2). How-

ever, institutions that enrolled students with disabilities were much more likely to work with the state vocational rehabilitation agency than were institutions that did not enroll students with disabilities. Among the institutions that enrolled students with disabilities, public 2-year and 4-year institutions were much more likely than private 2-year and 4-year institutions, and large institutions were more likely than medium institutions, which were more likely than small institutions, to work with the state vocational rehabilitation agency (table 11).

Figure 2.—Percent of 2-year and 4-year postsecondary education institutions where the person or office responsible for providing support services to students with disabilities works, either formally or informally, with the state vocational rehabilitation agency regarding students with disabilities, by whether the institution enrolled students with disabilities in 1996-97 or 1997-98



NOTE: . Information about students with disabilities represents only those students who identified themselves to their institution as having a disability, since these are the only students about whom the institutions could report.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.



Table 11.—Percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities in 1996-97 or 1997-98 where the person or office responsible for providing support services to students with disabilities works, either formally or informally, with the state vocational rehabilitation agency regarding students with disabilities, by institutional characteristics

Institutional characteristic	Works with state vocational rehabilitation agency
All institutions	73
Institutional type	
Public 2-year	95
Private 2-year	48
Public 4-year	92
Private 4-year	55
Geographic region	
Northeast	. 71
Southeast	75
Central	76
West	71
Size of institution	
Less than 3,000	64
3,000 to 9,999	88
10,000 or more	. 96

NOTE: Percents are based on institutions that enrolled students with disabilities in 1996-97 or 1997-98. Information about students with disabilities represents only those students who identified themselves to their institution as having a disability, since these are the only students about whom the institutions could report.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.

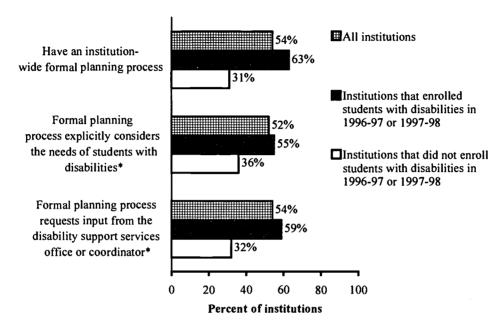
Planning Process for New Technologies

Office of The Special Education and Rehabilitative Services is interested in knowing to what extent the needs of students with disabilities are considered by institutions in the planning process for the purchase and implementation of new technologies, such as the upgrading or replacement of computers and telephones. All institutions, including those that did not enroll students with disabilities in 1996-97 or 1997-98, were asked whether the institution has an institution-wide formal planning process for the purchase and implementation of new technologies, and if so, whether the formal technology planning process explicitly considers the needs of students with disabilities, and whether input is requested from the disability support services office or coordinator to assist in the formal technology planning process.

About half (54 percent) of all institutions indicated that they have an institution-wide formal planning process (figure 3). Institutions that enrolled students with disabilities were more likely than institutions that did not enroll students with disabilities to have an institution-wide formal planning process: 63 percent compared with 31 percent. Among those institutions with an institution-wide formal planning process, about half of all institutions explicitly considered the needs of students with disabilities, and about half requested input from the disability support services office or coordinator. Institutions that enrolled students with disabilities were more likely to consider the needs of students with disabilities and seek input than were institutions that did not enroll students with disabilities (figure 3). Among institutions that enrolled students with disabilities and that have a formal planning process, public 2-year and 4-year



Figure 3.—Percent of 2-year and 4-year postsecondary institutions with an institution-wide formal planning process for the purchase and implementation of new technologies, and whether the planning process explicitly considers the needs of students with disabilities, or requests input from the disability support services office or coordinator, by whether the institution enrolled students with disabilities in 1996-97 or 1997-98



^{*}Based on those institutions that have an institution-wide formal planning process for the purchase and implementation of new technologies. NOTE: Information about students with disabilities represents only those students who identified themselves to their institution as having a disability, since these are the only students about whom the institutions could report.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.



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Table 12.—Percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities in 1996-97 or 1997-98 with an institution-wide formal planning process for the purchase and implementation of new technologies, and whether the planning process explicitly considers the needs of students with disabilities, or requests input from the disability support services office or coordinator, by institutional characteristics

		The formal planning process:*				
Institutional characteristic	Have an institution-wide formal planning process	Explicitly considers the needs of students with disabilities	Requests input from the disability support service office or coordinator			
All institutions	63	55	59			
nstitutional type						
Public 2-year	69	69	71			
Private 2-year	62	39	43			
Public 4-year	56	62	66			
Private 4-year	60	43	49			
Geographic region						
Northeast	64	56	67			
Southeast	67	53	66			
Central	65	53	50			
West	56	58	50			
Size of institution						
Less than 3,000	62	50	51			
3,000 to 9,999	64	61	69			
10,000 or more	68	71	79			

^{*}Based on those institutions that have an institution-wide formal planning process for the purchase and implementation of new technologies.

NOTE: Percents are based on institutions that enrolled students with disabilities in 1996-97 or 1997-98. Information about students with disabilities represents only those students who identified themselves to their institution as having a disability, since these are the only students about whom the institutions could report.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.

institutions were more likely than private 2-year and 4-year institutions, and large institutions were more likely than medium and small institutions, to explicitly consider the needs of students with disabilities (table 12). Similarly, public 2-year institutions were more likely than private 2-year and 4-year institutions, and public 4-year

institutions were more likely than private 4-year institutions, to seek input from the disability support services office or coordinator (table 12). In addition, large institutions were more likely than medium institutions, which were more likely than small institutions, to seek such input.



4. MATERIALS AND ACTIVITIES DESIGNED FOR WORKING WITH STUDENTS WITH DISABILITIES

This section provides information education materials or activities that institutions provide for faculty and staff designed to assist them in working with students with disabilities. Faculty and staff need information about the rights of students with disabilities to receive services or accommodations, what kinds of services or accommodations are considered reasonable or appropriate, who at the institution can provide information and assistance, and how they can best assist students with disabilities with whom they work. This information may be provided to faculty and staff in numerous ways. such as mailings, presentations, or discussions. Institutions may also develop special outreach or recruitment materials or activities designed specifically to recruit students with disabilities. These outreach or recruitment materials may be provided to, or activities conducted with, various groups that may refer students for enrollment in the institution.

Education Materials and Activities for Faculty and Staff

All institutions, including those that did not enroll any students with disabilities in 1996-97 or 1997-98, were asked about the education materials or activities that they provide for faculty and staff designed to assist them in working with students with disabilities. Eighty-four percent of all institutions provided at least one kind of education material or activity for faculty and staff (not shown in tables). The provision of various materials and activities ranged from 25 percent of all institutions providing annual mailings to faculty and staff to 79 percent providing one-onone discussions with faculty and staff who request information and assistance (table 13). Institutions that enrolled students with disabilities were more likely to provide each of the listed materials and activities than were institutions that did not enroll students with disabilities.

Table 13.—Percent of 2-year and 4-year postsecondary education institutions with various kinds of education materials or activities designed to assist faculty and staff in working with students with disabilities, by whether the institution enrolled students with disabilities in 1996-97 or 1997-98

Enrollment of students with disabilities	Faculty/ staff handbook	Annual mailings to faculty/staff	Workshops and presentations to faculty groups	One-on-one discussions with faculty/ staff who request information or assistance	Information resources (e.g., books, videotapes) available for faculty/staff use	Other
All institutions	35	25	51	79	50	9
Institutions that enrolled students with disabilities in 1996-97 or 1997-98	41	32	63	92	62	11
Institutions that did not enroll students with disabilities in 1996-97 or 1997-98	19	6	19	47	22	3

NOTE: Information about students with disabilities represents only those students who identified themselves to their institution as having a disability, since these are the only students about whom the institutions could report.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.



Table 14.—Percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities in 1996-97 or 1997-98 that have various kinds of education materials or activities designed to assist faculty and staff in working with students with disabilities, by institutional characteristics

Institutional characteristic	Faculty/ staff handbook	Annual mailings to faculty/staff	Workshops and presentations to faculty groups	One-on-one discussions with faculty/staff who request information or assistance	Information resources (e.g., books, videotapes) available for faculty/staff use	Other
All institutions	41	32	63	92	62	11
Institutional type		,				
Public 2-year	56	38	74	97	75	12
Private 2-year	25	9	32	74	33	2
Public 4-year	49	48	82	98	77	17
Private 4-year	29	30	56	92	53	11
Geographic region						
Northeast	44	39	76	94	71	15
Southeast	45	30	63	93	62	7
Central	28	31	58	94	62	9
West	45	30	57	87	53	13
Size of institution						
Less than 3,000	33	23	53	89	53	9
3,000 to 9,999	54	47	78	97	77	14
10,000 or more	63	59	94	99	83	19

NOTE: Percents are based on institutions that enrolled students with disabilities in 1996-97 or 1997-98. Information about students with disabilities represents only those students who identified themselves to their institution as having a disability, since these are the only students about whom the institutions could report.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.

Almost all (95 percent) of the institutions that enrolled students with disabilities in 1996-97 or 1997-98 provided at least one kind of education material or activity for faculty and staff (not shown in tables). Among institutions that enrolled students with disabilities, institutions (92 percent) provided one-on-one discussions with faculty and staff who request information or assistance (table 14). provision of the other listed materials and activities ranged from 32 percent providing annual mailings to faculty and staff to 63 percent providing workshops and presentations to faculty In general, public 2-year and 4-year institutions were more likely than private 2-year and 4-year institutions to provide the various kinds of education materials and activities. In addition, large institutions were more likely than medium institutions, which were more likely than

small institutions, to provide the education materials and activities.

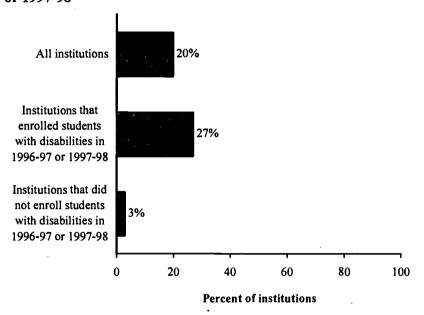
Outreach or Recruitment Materials or Activities Designed to Recruit Students with Disabilities

All institutions, including those that did not enroll any students with disabilities in 1996-97 or 1997-98, were asked whether they had developed any special outreach or recruitment materials or activities designed specifically to recruit students with disabilities.¹³ A fifth of all institutions had developed such materials or activities (figure 4).



¹³During recruitment efforts, postsecondary institutions are generally barred from making preadmission inquiries about whether an individual has a disability under the Section 504 regulations of the Department of Education.

Figure 4.—Percent of 2-year and 4-year postsecondary education institutions that have developed special outreach or recruitment materials or activities designed specifically to recruit students with disabilities, by whether the institution enrolled students with disabilities in 1996-97 or 1997-98



NOTE: Information about students with disabilities represents only those students who identified themselves to their institution as having a disability, since these are the only students about whom the institutions could report.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.

Institutions that enrolled students with disabilities in 1996-97 or 1997-98 were more likely to have developed special outreach or recruitment materials or activities than were institutions that did not enroll students with disabilities during that time. Among institutions that enrolled students with disabilities, public 2-year and 4-year institutions were more likely than private 2-year and 4-year institutions to have developed special outreach or recruitment materials or activities. In addition, large institutions were more likely than medium institutions, which were more likely than small institutions, to have developed such materials or activities (table 15).

Institutions that had developed special outreach or recruitment materials or activities were asked whether these materials had been provided to, or any of the activities conducted with, various groups that may refer students for enrollment in the institution. Among institutions that enrolled students with disabilities in 1996-97 or 1997-98. most had provided materials to or conducted activities with high school counselors or transition coordinators, and about three-quarters had done so with state vocational rehabilitation agencies (table 15). About half of the institutions had provided materials to or conducted activities with other types of vocational rehabilitation agencies, community and civic organizations, and other postsecondary institutions, and about a quarter had done so with businesses or employers. Medium and large institutions were more likely than small institutions to have provided materials to or conducted activities with high school counselors or transition coordinators, other postsecondary institutions, and other types of vocational rehabilitation agencies.



Table 15.—Percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities in 1996-97 or 1997-98 that have developed special outreach or recruitment materials or activities designed specifically to recruit students with disabilities, and the audiences for those materials and activities, by institutional characteristics

	Ť	Audiences for materials and activities*							
Institutional characteristic	Developed materials or activities	High school counselors and/or transition coordinators	Other postsecondary institutions	Businesses/ employers	Community and civic organizations	State vocational rehabilitation agencies	Other types of vocational rehabilitation agencies	Other	
All institutions	27	91	50	26	49	76	50	12	
Institutional type									
Public 2-year	47	96	47	33	55	85	57	13	
Private 2-year	6	(#)	(#)	(#)	(#)	(#)	(#)	(#)	
Public 4-year	39	87	66	22	47	70	5 0	16	
Private 4-year	10	(#)	(#)	(#)	(#)	(#)	(#)	(#)	
Geographic region		•							
Northeast	23	93	65	16	35	73	52	11	
Southeast	27	90	50	35	62	78	56	13	
Central	21	87	49	28	49	81	53	14	
West	34	92	44	23	45	72	40	11	
Size of institution									
Less than 3,000	16	83	34	22	42	68	37	8	
3,000 to 9,999	42	96	61	. 29	52	81	61	14	
10,000 or more	58	97	64	28	57	81	56	17	

^{*}Based on those institutions that have developed special outreach or recruitment materials or activities designed specifically to recruit students with disabilities.

NOTE: Percents are based on institutions that enrolled students with disabilities in 1996-97 or 1997-98. Information about students with disabilities represents only those students who identified themselves to their institution as having a disability, since these are the only students about whom the institutions could report.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.



^(#) Too few cases for a reliable estimate.

5. RECORDS ABOUT STUDENTS WITH DISABILITIES

section provides information about This institutional recordkeeping concerning students with disabilities. OSERS will use this information to help them assess the feasibility of collecting information from institutions about students with disabilities as part of existing ED data collections. Institutions that enrolled any students with disabilities in 1996-97 or 1997-98 were asked how the records about students with disabilities were maintained, what information was currently contained in the records, and the ease with which information not currently in the records could be added or merged to the records. While some institutions may have multiple recordkeeping systems about students with disabilities, such as paper files in the disability support services office and data elements about student disabilities on the general student record system, institutions were asked to respond about the record system that they used to prepare the counts of students with disabilities given in the questionnaire.

How Records about Students with Disabilities Are Maintained

Discussions with institutions during survey development indicated that there were a number of different ways in which institutions might maintain their records about students with disabilities. ¹⁴ Records could be maintained in a computerized database as part of the general student record system and be accessible to various institutional offices, such as the registrar or the Dean of Students. Records could also be part of the general student record system but only be accessible to the office or person responsible for providing support services to students with disabilities. This might be handled through

having data elements on the file that refer to students with disabilities appear in a code that is not known by other offices at the institution, or by protecting access to the records on students with disabilities with a password. Records could also be maintained in a separate computerized database by the office or person responsible for providing support services to students with disabilities. Such databases might commercially available software, such AbleAid, or may be developed by the institution, and may or may not be able to be linked with other databases maintained by the institution, such as the general student record system. Records could also be maintained only in paper files by the office or person responsible for providing support services to students with disabilities. Some institutions, particularly if they have a very small number of students with disabilities, may maintain no formal records about students with disabilities.

Half of the institutions reported that their records about students with disabilities are maintained only in paper files by the office or person responsible for providing support services to students with disabilities, and 20 percent indicated that the records are maintained in a separate computerized database by the disability support services office or coordinator (table 16). Thus, the majority of records about students with disabilities are maintained by the office or person responsible for providing support services to these students. Records are maintained in a computerized database as part of the general student record system and are accessible to various institutional offices at 13 percent of the institutions, and are part of the general student record system but accessible only to the disability support services office or coordinator at 8 percent of the institutions. Nine percent of the

¹⁴The way in which an institution maintains these records must be consistent with confidentiality requirements.



Table 16.—Percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities in 1996-97 or 1997-98 indicating how they maintain their records about students with disabilities, by institutional characteristics

Institutional characteristic	Computerized database as part of the general student record system, accessible to various institutional offices		Separate computerized database maintained by the disability support services office/coordinator	Only paper files maintained by the disability support services office/ coordinator	No formal records are maintained about students with disabilities
All institutions	13	8	20	50	9
Institutional type					
Public 2-year	20	15	23	38	3
Private 2-year	15	1	5	48	31
Public 4-year	5	10	40	42	2
Private 4-year	8	2	14	66	10
Geographic region					
Northeast	9	9	21	53	8
Southeast	12	10	16	51	10
Central	9	3	23	55	9
West	19	8	21	43	10
Size of institution					
Less than 3,000	13	5	13	55	14
3,000 to 9,999	11	13	26	50	(+)
10,000 or more	14	15	48	22	0

⁽⁺⁾ Less than 0.5 percent.

NOTE: Percents are based on institutions that enrolled students with disabilities in 1996-97 or 1997-98. Information about students with disabilities represents only those students who identified themselves to their institution as having a disability, since these are the only students about whom the institutions could report. Percents may not sum to 100 because of rounding. Zeros appear in the table when no institution in the sample gave the indicated response.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.

institutions reported that they maintained no formal records about students with disabilities. Since only about a fifth of institutions maintain their records as part of the general student record system, it is unlikely that reporting about students with disabilities could be easily integrated into existing U.S. Department of Education data collections, such as the Integrated Postsecondary Education Data System, which rely on the general student record system for information.

How records about students with disabilities are maintained varied by institutional type (table 16). For example, more public 4-year than other types of institutions indicated that records are maintained in a separate computerized database by the disability support services office or

coordinator, and more private 4-year than other types of institutions reported that records are maintained only in paper files. About a third of private 2-year institutions, compared with 10 percent or fewer of the other types of institutions, indicated that they maintained no formal records about students with disabilities. There was also some variation in recordkeeping by institutional For example, about half of small and medium institutions reported that records are maintained only in paper files, compared with 22 percent of large institutions. Large institutions were more likely than medium institutions, which were more likely than small institutions, to indicate that records are maintained in a separate computerized database by the disability support services office or coordinator.



Variables Contained on the Records about Students with Disabilities

Institutions were asked to indicate whether the records about students with disabilities that they used to provide the counts in the questionnaire currently contained certain variables. For any variable not currently on the records, institutions were asked to indicate whether the variable (1) could be obtained from intake questionnaires or other institutional records or databases and easily added/merged to the records for students with disabilities. (2) could be obtained added/merged to the records, but it would be a difficult and/or time-consuming process, or (3) could not be added/merged to the records. It is important to keep in mind that the records being referred to by half of the institutions are paper files maintained by the disability support services office or coordinator (see table 16).

About three-quarters of the institutions that maintain formal records about students with disabilities indicated that their records currently contained information about level (undergraduate/ graduate), and about two-thirds indicated that the records contained information about sex, age or date of birth, and major field of study/program (table 17). Attendance status (full or part time) was included by 59 percent of the institutions. race/ethnicity by 49 percent, and certificates or degrees awarded by 45 percent of the institutions. About a third of the institutions included information about whether a student receives financial aid. There was some variation by institutional type in which variables were

Table 17.—Percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities in 1996-97 or 1997-98 indicating that their records about students with disabilities currently contain selected variables, and if not, how easily the variables can be added or merged to the records, by institutional characteristics

Institutional		Sex		R	ace/ethnici	ty	Age	or date of birth		Attendance status (full or part time)		
characteristic		Can be	added:1		Can be	added:1		Can be added:1			Can be	added:1
Characteristic	On record	Easily	With	On record	Easile	With	On record	Facil.	With	On record	Feetl	With
		Lasily	difficulty		Easily	difficulty		Easily	difficulty		Easily	difficulty
All institutions	68	73	24	49	66	28	66	71	26	59	70	25
Institutional type												
Public 2-year	72	77	20	63	74	21	69	71	25	57	67	27
Private 2-year	70	(#)	. (#)	54	(#)	(#)	72	(#)	(#)	83	(#)	(#)
Public 4-year	67	66	30	41	60	34	63	67	29	50	61	36
Private 4-year	65	76	21	36	64	28	61	70	26	59	76	18
Geographic region												
Northeast	70	67	28	39	59	32	55	75	22	66	75	21
Southeast	77	81	19	56	78	18	75	71	26	60	77	21
Central	60	78	21	44	68	28	63	81	18	56	70	27
West	66	69	28	54	59	32	67	56	38	56	61	29
Size of institution												
Less than 3,000	68	76	23	49	69	25	67	74	22	63	80	15
3,000 to 9,999	67 .	68	27	46	62	30	61	63	32	54	56	39
10,000 or more	71	71	26	53	58	36	68	70	26	50	59	37



Table 17.—Percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities in 1996-97 or 1997-98 indicating that their records about students with disabilities currently contain selected variables, and if not, how easily the variables can be added or merged to the records, by institutional characteristics—continued

Institutional	Level (undergraduate/ graduate) ²			1	Whether student receives financial aid			Major field of study/program			Certificates or degrees awarded by the institution		
characteristic		Can be	added:1		Can be added:1			Can be added:1			Can be added:1		
	On record	Easily	With difficulty	On record	Easily	With difficulty	On record	Easily	With difficulty	On record	Easily	With difficulty	
All institutions	74	70	25	34	60	30	68	72	23	45	68	25	
Institutional type													
Public 2-year				44	59	34	76	70	26	50	65	29	
Private 2-year				67	(#)	(#)	87	(#)	(#)	76	(#)	(#)	
Public 4-year	78	66	31	20	53	39	67	70	28	33	63	30	
Private 4-year	71	72	21	21	62	25	56	71	21	35	72	20	
Geographic region													
Northeast	76	77	19	27	53	37	66	64	30	48	70	20	
Southeast	83	71	29	41	71	23	68	79	16	48	74	20	
Central	71	72	28	27	63	31	67	79	20	40	72	25	
West	68	61	26	39	53	31	72	64	28	42	57	34	
Size of institution													
Less than 3,000	73	81	11	39	68	22	68	76	17	47	74	20	
3,000 to 9,999	74	59	38	25	51	41	67	64	34	41	60	32	
10,000 or more	77	65	35	30	46	47	73	68	32	39	57	39	

⁻⁻ Does not apply to 2-year institutions.

NOTE: Percents are based on institutions that enrolled students with disabilities in 1996-97 or 1997-98, and that maintain formal records about students with disabilities. Nine percent of the institutions reported that they maintained no formal records about students with disabilities. Information about students with disabilities represents only those students who identified themselves to their institution as having a disability, since these are the only students about whom the institutions could report.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.

included on the records. For example, public 2-year institutions were more likely than public or private 4-year institutions to include information about race/ethnicity, financial aid, and certificates or degrees awarded by the institution. This may be because public 2-year institutions were more likely than public or private 4-year institutions to maintain their records about students with disabilities as part of the general student record system (see table 16), and the general student record system often contains this type of information about students. Information not

currently contained in the records about students with disabilities could be added or merged to the records by almost all the institutions without the information on their records, and most indicated that the information could be added easily (table 17). Again, it is important to keep in mind that half the institutions maintain records only in paper files kept by the disability support services office or coordinator. Adding information to paper files is generally not a difficult task for institutions.



^(#) Too few cases for a reliable estimate.

Percents based on those institutions indicating that their records about students with disabilities do not currently contain that variable. Responses for "easily," "with difficulty," and "no" sum to 100 percent. Percents for "no" are not shown on the table.

²Based only on those institutions that have both undergraduate and graduate level students.

6. SUMMARY

The increased enrollment of persons with disabilities in postsecondary education, along with key legislation such as the Americans with Disabilities Act and the Individuals with prompted Disabilities Education Act, has numerous questions regarding access, support, and accommodations in postsecondary education institutions. The Office of Special Education and Rehabilitative Services, U.S. Department of Education, requested this study on students with disabilities at postsecondary education institu-It was designed to provide nationally tions. representative data from postsecondary education institutions about enrollments of students with disabilities and the support services and accommodations they provide to these students. These are the first nationally representative data collected from institutions about these students. The study also obtained information regarding institutional records and reporting about students OSERS will use with disabilities. information to help them assess the feasibility of collecting information from institutions about students with disabilities as part of existing ED data collections, such as the Integrated Postsecondary Education Data System.

About three-quarters (72 percent) of the nation's 5,040 2-year and 4-year postsecondary education institutions enrolled students with disabilities in 1996-97 or 1997-98. Almost all (98 percent) public 2-year and public 4-year institutions enrolled students with disabilities, compared with 63 percent of private 4-year and 47 percent of private 2-year institutions. Virtually all medium and large institutions (99 and 100 percent, respectively) enrolled students with disabilities, compared with 63 percent of small institutions.

Sixty percent of institutions enrolled students with specific learning disabilities, and 56 percent enrolled students with mobility or orthopedic impairments. Many institutions also enrolled students with hearing impairments (48 percent), who were blind or visually impaired (46 percent),

had health impairments or problems (45 percent), or who reported a mental illness or emotional disturbance (39 percent). About a fifth of the institutions enrolled students with speech or language impairments (18 percent), or specified some other disability (21 percent). For each of the disability categories, public 2-year and public 4-year institutions were much more likely than private 2-year and private 4-year institutions, and medium and large institutions were much more likely than small institutions, to enroll students with that disability.

An estimated 428,280 students with disabilities were enrolled at 2-year and 4-year postsecondary education institutions in 1996-97 or 1997-98. The number of students with disabilities represents only those students who had identified themselves in some way to the institution as having a disability, since these are the only students about whom the institutions could report. Consistent with the distributions of the percentage of institutions that enrolled students with disabilities, most of the students with disabilities were enrolled at public 2-year and public 4-year institutions and at medium and large institutions.

Specific learning disabilities was the most frequent disability, with almost half of the students with disabilities (195,870 out of 428,280 students) in this category. Institutions reported 59,650 students with mobility or orthopedic impairments. 49,570 students with health impairments or problems, and 33,260 students with mental illness or emotional disturbance. Institutions also reported 23,860 students with a hearing impairment, 18,650 students that were blind or visually impaired, and 4,020 students that had a speech or language impairment. remaining 38,410 students were reported by the institutions in the "other, specify" category.

Most institutions (88 percent) reported unduplicated counts of students by specific disabilities (i.e., students were counted by their



only or their primary disability), 10 percent reported duplicated counts (i.e., students were counted for each disability they have or each disability for which services were provided), and 2 percent of the institutions could not report any information about the specific disabilities of their students. Most institutions (92 percent) also reported an unduplicated count of the total number of students with disabilities. There was little variation by institutional type and size in the type of counts reported.

Twenty-eight percent of the institutions indicated that their counts of students with disabilities included only those students to whom services or accommodations were provided; 38 percent reported that their counts were based on students who provided verification of their disabilities, regardless of whether services or accommodations were provided; 22 percent included students who identified themselves to the disability support services office or coordinator, regardless of verification or provision of services; and 12 percent said that their counts were based on all students that had been reported to the disability support services office or coordinator, regardless of whether that office had any contact with them.

Eighty-four percent of institutions that enrolled students with disabilities in 1996-97 or 1997-98 required verification of student disabilities. Most institutions that enrolled students with disabilities and required verification accepted a medical evaluation/statement or a psychological evaluation/statement as verification; about threequarters accepted a vocational rehabilitation agency evaluation. About a quarter of the institutions indicated that testing or formal evaluation by the institution's disability support services office or coordinator was accepted, and about a quarter indicated that they accepted an informal evaluation or determination by the institution's disability support services office or coordinator as verification.

Almost all (98 percent) of the institutions that enrolled students with disabilities in 1996-97 or 1997-98 had provided at least one special support service or accommodation designed for disabled students to a student with disabilities in 1996-97 or 1997-98. Most institutions (88 percent) had

provided alternative exam formats or additional time, and 77 percent provided tutors to assist with ongoing coursework. Readers, classroom notetakers, or scribes were provided by 69 percent of the institutions, and registration assistance or priority class registration were provided by 62 percent. Institutions also frequently provided adaptive equipment or technology, such as assistive listening devices or talking computers (58 percent), and textbooks on tape (55 percent). Sign language interpreters/ transliterators were provided by 45 percent of the institutions, and course substitutions or waivers by 42 percent. Various other support services were provided by one-third or fewer of the institutions. About three-quarters (73 percent) of the institutions that enrolled students with disabilities indicated that they worked, either formally or informally, with the state vocational rehabilitation agency regarding students with disabilities.

Sixty-three percent of institutions that enrolled students with disabilities in 1996-97 or 1997-98 indicated that they have an institution-wide formal planning process for the purchase and implementation of new technologies, such as the upgrading or replacement of computers and telephones. Among those institutions that enrolled students with disabilities and that have an institution-wide formal planning process, 55 percent indicated that the planning process explicitly considers the needs of students with disabilities, and 59 percent indicated that the planning process requests input from the disability support services office or coordinator.

Almost all (95 percent) of the institutions that enrolled students with disabilities in 1996-97 or 1997-98 provided at least one kind of educational material or activity for faculty and staff designed to assist them in working with students with disabilities. Most of these institutions (92 percent) provided one-on-one discussions with faculty and staff who request information and assistance, 63 percent provided workshops and presentations to faculty groups, 62 percent had information resources available for faculty and staff use, 41 percent had a faculty/staff handbook, and 32 percent did annual mailings to faculty and staff.



About a quarter (27 percent) of institutions that enrolled students with disabilities in 1996-97 or 1997-98 had developed special outreach or recruitment materials or activities designed specifically to recruit students with disabilities. Among the institutions that had developed such materials or activities, most (91 percent) had provided materials to or conducted activities with high school counselors or transition coordinators, and about three-quarters had done so with state vocational rehabilitation agencies. About half of the institutions had provided materials to or conducted activities with other types of vocational rehabilitation agencies, community and civic organizations, and other postsecondary institutions, and about a quarter had done so with businesses or employers.

Half of the institutions reported that their records about students with disabilities are maintained only in paper files by the office or person responsible for providing support services to students with disabilities, and 20 percent indicated that the records are maintained in a separate computerized database by the disability support services office or coordinator. Thus, the majority of records about students with disabilities are maintained by the office or person responsible for providing support services to Records are maintained in a these students. computerized database as part of the general student record system and are accessible to various institutional offices at 13 percent of the institutions, and are part of the general student record system but accessible only to the disability support services office or coordinator at 8 percent of the institutions. Nine percent of the institutions reported that they maintained no formal records about students with disabilities. Since only about a fifth of institutions maintain their records as part of the general student record system, it is unlikely that reporting about students with disabilities could be easily integrated into existing U.S. Department of Education data collections, such as IPEDS, which rely on the general student record system for information.

About three-quarters of the institutions indicated that their records currently contained information about level (undergraduate/graduate), and about two-thirds indicated that the records contained information about sex, age or date of birth, and major field of study/program. Attendance status (full or part time) was included by 59 percent of the institutions, race/ethnicity by 49 percent, and certificates or degrees awarded by 45 percent of the institutions. About a third of the institutions included information about whether a student receives financial aid. Information not currently contained in the records about students with disabilities could be added or merged to the records by almost all the institutions without the information on their records, and most indicated that the information could be added easily.



7. SURVEY METHODOLOGY AND DATA RELIABILITY

Postsecondary Education Quick Information System

The Postsecondary Education Quick Information System (PEQIS) was established in 1991 by the National Center for Education Statistics, U.S. Department of Education. PEQIS is designed to postsecondary surveys brief of institutions or state higher education agencies on postsecondary education topics of national importance. Surveys are generally limited to two or three pages of questions, with a response burden of about 30 minutes per respondent. Most PEQIS institutional surveys use a previously recruited, nationally representative panel of institutions. The PEQIS panel was originally selected and recruited in 1991-92. In 1996, the PEQIS panel was reselected to reflect changes in the postsecondary education universe that had occurred since the original panel was selected. A modified Keyfitz approach was used to maximize overlap between the 1996 panel and the 1991-92 panel. The sampling frame for the PEQIS panel recruited in 1996 was constructed from the 1995-96 IPEDS Institutional Characteristics file. Institutions eligible for the PEQIS frame for the panel recruited in 1996 included 2-year and 4year (including graduate-level) institutions (both institutions of higher education and other postsecondary institutions), and less-than-2-year institutions of higher education located in the 50 states and the District of Columbia: a total of 5.353 institutions.

The PEQIS sampling frame for the panel recruited in 1996 was stratified by instructional level (4-year, 2-year, less-than-2-year), control (public, private nonprofit, private for-profit), highest level of offering (doctor's/first professional, master's, bachelor's, less than bachelor's), total enrollment, and status as either an institution of higher education or other postsecondary institution. Within each of the

institutions were sorted by region (Northeast, Southeast, Central, West), whether the institution had a relatively high minority enrollment, and whether the institution had research expenditures exceeding \$1 million. The sample of 1,669 institutions was allocated to the strata in proportion to the aggregate square root of total enrollment. Institutions within a stratum were sampled with equal probabilities of selection. The modified Keyfitz approach resulted in 80 percent of the institutions in the 1996 panel overlapping with the 1991-92 panel. Panel recruitment was conducted with the 338 institutions that were not part of the overlap sample. During panel recruitment, 20 institutions were found to be ineligible for PEQIS, primarily because they had closed or offered just correspondence courses. The final unweighted response rate at the end of PEQIS panel recruitment with the institutions that were not part of the overlap sample was 98 percent (312 of the 318 eligible institutions). The final participation rate across the 1,669 institutions that were selected for the 1996 panel was 1,628 participating institutions out of 1,634 eligible There were 1,634 eligible institutions. institutions because 15 institutions in the overlap sample were determined to be ineligible for various reasons.

Each institution in the PEQIS panel was asked to identify a campus representative to serve as survey coordinator. The campus representative facilitates data collection by identifying the appropriate respondent for each survey and forwarding the questionnaire to that person.



Sample and Response Rates

The sample for this survey consisted of two-thirds of the institutions in the PEQIS panel, ¹⁵ for a sample of 1,084 institutions. In January 1998, questionnaires (see appendix B) were mailed to the PEQIS coordinators at the institutions. Coordinators were told that the survey was designed to be completed by the person or office at the institution most knowledgeable about students with disabilities, and the services provided to these students by the institution.

Fifteen institutions were found to be out of the scope of the survey because they were closed, leaving 1,069 eligible institutions. These 1,069 institutions represent the universe of approximately 5,040 2-year and 4-year (including graduate-level) postsecondary education institutions in the 50 states and the District of Columbia. Telephone followup of nonrespondents was initiated in early February 1998; data collection and clarification was completed in early April 1998. For the eligible institutions that received surveys, an unweighted response rate of 91 percent (977 responding institutions divided by the 1,069 eligible institutions in the sample) was obtained. The weighted response rate for this survey was also 91 percent. The unweighted overall response rate was 91 percent (99.6 percent panel recruitment participation rate multiplied by the 91.4 percent survey response rate). weighted overall response rate was also 91 percent (99.7 percent weighted panel recruitment participation rate multiplied by the 91.2 percent weighted survey response rate).

Weighted item nonresponse rates ranged from 0 percent to 3 percent. Item nonresponse rates for most items were less than 1 percent. Because the item nonresponse rates were so low, imputation for item nonresponse was not implemented. Instead, item nonresponse for ratios was handled by dropping cases with missing values from both the numerator and denominator for the calculation of affected percents. For sums, item nonresponse

15 The PEQIS panel is divided into three subpanels. Surveys typically use two out of three of the subpanels on a rotating basis to reduce respondent burden. was handled by adding footnotes to the text and tables.

Sampling and Nonsampling Errors

The response data were weighted to produce national estimates (see table 18). The weights were designed to adjust for the variable probabilities of selection and differential nonresponse. The findings in this report are estimates based on the sample selected and, consequently, are subject to sampling variability.

The survey estimates are also subject to nonsampling errors that can arise because of nonobservation (nonresponse or noncoverage) errors, errors of reporting, and errors made in data collection. These errors can sometimes bias the Nonsampling errors may include such problems as misrecording of responses; incorrect editing, coding, and data entry; differences related to the particular time the survey was conducted; or errors in data preparation. While general sampling theory can be used in part to determine how to estimate the sampling variability of a statistic, nonsampling errors are not easy to measure and, for measurement purposes, usually require that an experiment be conducted as part of the data collection procedures or that data external to the study be used.

To minimize the potential for nonsampling errors, the questionnaire was pretested with respondents at institutions like those that completed the survey. During the design of the survey and the survey pretest, an effort was made to check for consistency of interpretation of questions and to eliminate ambiguous items. The questionnaire and instructions were extensively reviewed by the National Center for Education Statistics and the Office of Special Education and Rehabilitative Services, U.S. Department of Education. Manual and machine editing of the questionnaire responses were conducted to check the data for accuracy and consistency. Cases with missing or inconsistent items were recontacted by telephone. Data were keyed with 100 percent verification.



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Table 18.—Number and percentage distribution of 2-year and 4-year postsecondary education institutions in the study, and the estimated number and percentage distribution in the nation, for the total sample and for institutions that enrolled students with disabilities in 1996-97 or 1997-98, by institutional characteristics: 1998

		Total	sample		Enrolled students with disabilities in 1996-97 or 1997-98			
Institutional characteristic	Respondents		National estimate*		Respondents		National estimate*	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All institutions	977	100	5,040	100	840	100	3,630	100
Institutional type								
Public 2-year	283	29	1,240	25	280	33	1,220	34
Private 2-year	131	13	1,140	23	72	9	530	15
Public 4-year	250	26	610	12	247	29	590	16
Private 4-year	313	32	2,060	41	241	29	1,290	36
Geographic region								
Northeast	229	23	1,210	24	191	23	790	22
Southeast	230	24	1,230	24	209	25	1,030	28
Central	237	24	1,290	26	200	24	860	24
West	281	29	1,310	26	240	29	960	26
Size of institution								
Less than 3,000	488	50	3,830	76	353	42	2,430	67
3,000 to 9,999	239	24	810	16	237	28	800	22
10,000 or more	250	26	400	8	250	30	400	11

^{*}Data presented in all tables are weighted to produce national estimates. The sample was selected with probabilities proportionate to the square root of total enrollment. Institutions with larger enrollments have higher probabilities of inclusion and lower weights. The weighted numbers of institutions have been rounded to the nearest 10.

NOTE: Information about students with disabilities represents only those students who identified themselves to their institution as having a disability, since these are the only students about whom the institutions could report. Data are for postsecondary education institutions in the 50 states and the District of Columbia. Percents may not sum to 100 and numbers may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.

Variances

The standard error is a measure of the variability of estimates due to sampling. It indicates the variability of a sample estimate that would be obtained from all possible samples of a given design and size. Standard errors are used as a measure of the precision expected from a particular sample. If all possible samples were surveyed under similar conditions, intervals of 1.96 standard errors below to 1.96 standard errors above a particular statistic would include the true population parameter being estimated in about 95 percent of the samples. This is a 95 percent confidence interval. For example, the estimated

percentage of institutions reporting that they enrolled students with disabilities in 1996-97 or 1997-98 is 72.1 percent, and the estimated standard error is 1.3 percent. The 95 percent confidence interval for the statistic extends from [72.1 - (1.3 times 1.96)] to [72.1 + (1.3 times 1.96)], or from 69.6 to 74.6 percent. Tables of standard errors for each table and figure in the report are provided in appendix A.

Estimates of standard errors were computed using a technique known as jackknife replication. As with any replication method, jackknife replication involves constructing a number of subsamples (replicates) from the full sample and computing



the statistic of interest for each replicate. The mean squared error of the replicate estimates around the full sample estimate provides an estimate of the variances of the statistics (Wolter. 1985). To construct the replications, 50 stratified subsamples of the full sample were created and then dropped one at a time to define 50 jackknife replicates (Wolter, 1985, p. 183). A computer program (WesVarPC), distributed free of charge by Westat through the Internet, 16 was used to calculate the estimates of standard errors. WesVarPC is a stand-alone Windows application that computes sampling errors for a wide variety of statistics (totals, percents, ratios, log-odds ratios, general functions of estimates in tables. regression parameters, and logistic regression parameters).

The test statistics used in the analysis were calculated using the jackknife variances and thus appropriately reflected the complex nature of the sample design. In particular, an adjusted chisquare test using Satterthwaite's approximation to the design effect was used in the analysis of the two-way tables. Finally, Bonferroni adjustments were made to control for multiple comparisons where appropriate. For example, for an "experiment-wise" comparison involving g pairwise comparisons, each difference was tested at the 0.05/g significance level to control for the fact that g differences were simultaneously tested.

Definitions of Analysis Variables

The following institutional characteristics were used as variables for analyzing the survey data:

• Type of institution: public 2-year, private 2-year, public 4-year, private 4-year. Type was created from a combination of level (2-year, 4-year) and control (public, private). Two-year institutions are defined as institutions at which the highest level of offering is at least 2 but less than 4 years (below the baccalaureate degree); 4-year

institutions are those at which the highest level of offering is 4 or more years (baccalaureate or higher degree). 18 Private comprises private nonprofit and private for-profit institutions; these private institutions are reported together because there are too few private for-profit institutions in the sample for this survey to report them as a separate category. Postsecondary education institutions include both institutions of higher education (traditional colleges, universities, and professional schools such as law and medical schools) and other postsecondary institutions (e.g., allied health vocational-technical schools). Less-than-2vear institutions are not included in the PEQIS panel or in this survey.

- Region: Northeast, Southeast, Central, and West. The states in each region are as follows:
 - Northeast: Connecticut, Delaware,
 District of Columbia, Maine,
 Maryland, Massachusetts, New
 Hampshire, New Jersey, New York,
 Pennsylvania, Rhode Island, and
 Vermont.
 - Southeast: Alabama, Arkansas,
 Florida, Georgia, Kentucky,
 Louisiana, Mississippi, North
 Carolina, Puerto Rico, South
 Carolina, Tennessee, Virginia, and
 West Virginia.
 - Central: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.
 - West: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oklahoma, Oregon, Texas, Utah, Washington, and Wyoming.



¹⁶WesVarPC version 2 is available through the Internet at http://www.westat.com/wesvar /.

¹⁷For example, see Rao and Scott, 1984.

¹⁸Definitions for level are from the data file documentation for the IPEDS Institutional Characteristics file, U.S. Department of Education, National Center for Education Statistics.

• Size of institution: less than 3,000 students (small); 3,000 to 9,999 students (medium); and 10,000 or more students (large).

Background Information

The survey was performed under contract with Westat, using the Postsecondary Education Quick Information System (PEQIS). This is the eighth PEQIS survey to be conducted. Westat's Project Director was Elizabeth Farris, and the Survey Manager was Laurie Lewis. Bernie Greene was the NCES Project Officer. The Office of Special Education and Rehabilitative Services, U.S. Department of Education requested the data.

The following individuals reviewed this report:

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- David Hurst, Education Statistics Services Institute
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- Michael Cohen, Office of the Deputy Commissioner
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For more information about the Postsecondary Education Quick Information System or the Survey on Students with Disabilities at Postsecondary Education Institutions, contact Bernie Greene, Early Childhood, International, and Crosscutting Studies Division, National Center for Education Statistics, Office of Educational Research and Improvement, 555 New Jersey Avenue, NW, Washington, DC 20208-5651, e-mail: Bernard_Greene@ed.gov, telephone (202) 219-1366.

References

- Horn, L., and Berktold, J. (1999). Students with disabilities in postsecondary education: A profile of preparation, participation, and outcomes. National Center for Education Statistics, U.S. Department of Education, Statistical Analysis Report No. 1999-187. Washington, DC: U.S. Government Printing Office.
- Lewis, L., and Farris, E. (1994). Deaf and hard of hearing students in postsecondary education. National Center for Education Statistics, U.S. Department of Education, Statistical Analysis Report No. 94-394. Washington, DC: U.S. Government Printing Office.
- Rao, J.N.K., and Scott, A. (1984). On chi-square tests for multi-way contingency tables with cell proportions estimated from survey data. *Annals of Statistics*, 12, 46-60.
- U.S. Department of Education, National Center for Education Statistics. (1999). Digest of Education Statistics 1998 (NCES 1999-036). Washington, DC: U.S. Government Printing Office.
- Wolter, K. (1985). Introduction to variance estimation. Springer-Verlag.



Appendix A Tables of Standard Errors



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Standard Error Tables for Text Tables and Figures

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Standard Error Tables for Text Tables and Figures (continued)

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12a	Standard errors of the percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities in 1996-97 or 1997-98 with an institution-wide formal planning process for the purchase and implementation of new technologies, and whether the planning process explicitly considers the needs of students with disabilities, or requests input from the disability support services office or coordinator, by institutional characteristics
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17a	Standard errors of the percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities in 1996-97 or 1997-98 indicating that their records about students with disabilities currently contain selected variables, and if not, how easily the variables can be added or merged to the records, by institutional characteristics
19	Standard errors for the figures and for data not shown in tables: 1998



Table 1a.—Standard errors of the number of 2-year and 4-year postsecondary education institutions, and the number and percent that enrolled students with disabilities in 1996-97 or 1997-98, by institutional characteristics

	Total number of	Institutions enrolling students with disabilities			
Institutional characteristic	institutions	Number	Percent		
All institutions	42.0	70.6	1.3		
Institutional type					
Public 2-year	21.6	25.0	1.1		
Private 2-year	29.7	44.8	3.9		
Public 4-year	9.9	6.2	1.6		
Private 4-year	40.3	45.7	2.2		
Geographic region					
Northeast	55.9	40.5	2.7		
Southeast	53.0	34.2	2.6		
Central	95.4	53.7	4.3		
West	71.6	67.1	3.4		
Size of institution					
Less than 3,000	42.8	70.3	1.7		
3,000 to 9,999	7.6	8.1	0.4		
10,000 or more	2.1	2.1			

⁻⁻Estimate of standard error is not derived because it is based on a statistic estimated at 100 percent.



NOTE: Standard errors are computed on unrounded numbers.

Table 2a.—Standard errors of the percent of 2-year and 4-year postsecondary institutions that enrolled any students in each disability category in 1996-97 or 1997-98, by institutional characteristics

Institutional characteristic	Hearing impairment	Blind or visual impairment	Speech or language impairment	Mobility/ orthopedic impairment	Specific learning disabilities	Health impairment/ problem	Mental illness/ emotional disturbance	Other
All institutions	1.2	1.8	1.0	1.9	1.6	1.6	1.4	1.3
Institutional type								
Public 2-year	2.8	3.4	3.1	3.3	2.3	2.9	2.9	3.8
Private 2-year	3.5	2.7	1.4	4.3	4.3	3.3	2.1	2.1
Public 4-year	2.0	3.5	3.3	1.9	3.0	4.1	4.2	3.5
Private 4-year	2.1	2.5	1.3	3.2	1.7	2.4	2.2 ·	1.5
Geographic region								
Northeast	3.2	3.7	2.1	3.6	3.0	3.6	3.3	2.4
Southeast	3.8	4.3	2.5	3.2	3.7	3.8	3.4	3.1
Central	4.3	4.4	2.5	5.3	5.4	3.3	3.6	3.2
West	3.0	3.8	2.5	3.8	3.1	4.1	3.2	2.7
Size of institution								
Less than 3,000	1.4	2.3	1.1	2.5	•2.1	2.1	1.7	1.5
3,000 to 9,999	1.2	2.3	3.1	1.3	0.9	2.8	2.6	3.1
10,000 or more		0.4	3.3	0.6	0.4	1.6	1.6	4.0

⁻⁻Estimate of standard error is not derived because it is based on a statistic estimated at 100 percent.



Table 3a.—Standard errors of the percent of 2-year and 4-year postsecondary education institutions that indicated that they enrolled students with specific other disabilities in 1996-97 or 1997-98

Disability	Percent
Brain injury	0.9
Developmental disability	0.6
Neurological impairment	0.4
Substance abuse	0.4
Multiple disabilities	0.5
Temporary disabilities	0.3
Specific disability unknown	0.8
Other	0.4



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Table 4a.—Standard errors of the number of students in each disability category and total with any disability enrolled at 2-year and 4-year postsecondary education institutions in 1996-97 or 1997-98, by institutional characteristics

Institutional characteristic	Total with any disability	Hearing impairment	Blind or visual impairment	Speech or language impairment	Mobility/ orthopedic impairment	Specific learning disabilities	Health impairment/ problem	Mental illness/ emotional disturbance	Other
All institutions	11,069.3	1,706.3	854.0	437.8	2,702.0	5,704.4	3,142.1	1,959.3	4,864.4
Institutional type									
Public 2-year	10,190.1	764.1	698.4	413.2	2,437.1	4,790.3	2,404.1	1,347.1	4,696.3
Private 2-year	1,007.2	72.2	49.1	18.5	201.7	558.2	333.0	108.9	193.1
Public 4-year	7,102.4	406.9	534.6	144.3	1,509.1	4,150.5	1,301.7	1,142.8	1,001.0
Private 4-year	4,314.8	1,442.8	139.8	71.8	276.7	3,169.3	809.2	582.5	466.6
Geographic region						•			
Northeast	6,535.2	1,410.5	258.5	185.1	759.0	4,058.9	1,742.5	828.7	795.3
Southeast	4,809.4	467.3	353.3	106.5	1,185.8	2,889.2	1,183.3	721.7	730.2
Central	9,186.2	537.3	560.4	177.1	1,275.9	3,920.1	1,463.8	1,132.0	3,173.0
West	10,080.0	620.6	737.4	331.8	2,326.3	5,133.4	2,124.4	1,322.8	2,871.1
Size of institution									
Less than 3,000	5,125.0	460.1	475.7	218.0	1,806.6	2,704.5	1,343.7	851.9	707.9
3,000 to 9,999	7,467.6	382.2	363.8	196.5	1,119.7	3,078.3	1,987.4	1,051.9	3,853.8
10,000 or more	6,460.2	1,616.3	599.4	326.5	1,717.0	4,110.9	1,778.6	1,379.0	2,879.2

NOTE: Standard errors are computed on unrounded numbers.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.



Table 5a.—Standard errors of the number of students with specific other disabilities enrolled at 2year and 4-year postsecondary education institutions in 1996-97 or 1997-98, by institutional characteristics

inst	itutioma ci	iai acter is						
Institutional characteristic	Brain injury	Develop- mental disability	Neuro- logical impairment	Substance abuse	Multiple disabilities	Temporary disabilities	Specific disability unknown	Other
All institutions	969.1	1,286.7	158.0	257.5	889.3	271.8	4,245.7	1,204.2
Institutional type								
Public 2-year	924.7	1285.4	152.3	240.7	885.9	46.1	4,261.8	679.1
Private 2-year	7.1			11.5			191.6	••
Public 4-year	169.3	38.2	89.3	95.6	321.8	253.6	443.6	923.6
Private 4-year	52.6	14.7	24.2	6.7	12.5	46.7	337.0	240.8
Geographic region								
Northeast	144.1	27.9	41.9	185.3	388.9	66.9	390.3	287.4
Southeast	109.5	59.6	75.9	86.8	358.7	142.9	668.4	465.6
Central	143.7	221.7	51.3	58.3	646.9	126.7	2,085.6	354.8
West	913.0	1,296.9	140.4	168.9	357.8	176.5	2,012.7	1,072.9
Size of institution								
Less than 3,000	331.6	252.9	22.3	23.8	288.8		594.8	251.3
3,000 to 9,999		920.9	115.9	204.2	734.7	75.1	3,677.6	414.9
10,000 or more	834.7	862.8	108.6	155.0	409.4	261.2	2,128.2	1,102.0

⁻⁻Estimate of standard error is not derived because it is based on a statistic estimated at zero.



NOTE: Standard errors are computed on unrounded numbers.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.

Table 6a.—Standard errors of the percentage distributions of all students enrolled at 2-year and 4-year postsecondary education institutions, and of students who identified themselves to the institution as having a disability in 1996-97 or 1997-98, by institutional characteristics

Institutional characteristic	All students	Students who identified themselves to the institution as having a disability
All institutions		
Institutional type		
Public 2-year	0.7	1.8
Private 2-year	0.1	0.2
Public 4-year	0.7	1.5
Private 4-year	0.5	1.0
Geographic region		
Northeast	1.0	1.4
Southeast	1.1	1.3
Central	1.2	2.0
West	1.3	2.1
Size of institution .		
Less than 3,000	0.4	1.1
3,000 to 9,999	0.6	1.3
10,000 or more	0.7	1.3

⁻⁻Estimate of standard error is not derived because it is based on a statistic estimated at 100 percent.



Table 7a.—Standard errors of the percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities in 1996-97 or 1997-98 according to the type of count of the number of students by specific disability categories and the total number of students with disabilities, by institutional characteristics

Institutional characteristic	7.	unt of the number o	Type of count of the total number of students with disabilities		
	Unduplicated	Duplicated	Other*	Unduplicated	Duplicated
All institutions	1.5	1.4	0.6	1.4	1.4
Institutional type		·			
Public 2-year	2.1	1.8	1.2	1.9	1.9
Private 2-year	2.8	2.8	0.3	2.8	2.8
Public 4-year	2.8	2.9	0.4	2.0	2.0
Private 4-year	2.4	2.1	0.9	2.0	2.0
Geographic region					
Northeast	2.5	2.5	0.3	1.8	1.8
Southeast	3.2	3.1	0.9	3.1	3.1
Central	3.3	3.1	0.9	3.1	3.1
West	2.3	1.8	1.6	1.8	1.8
Size of institution					
Less than 3,000	2.0	1.8	0.8	1.9	1.9
3,000 to 9,999		2.0	1.0	1.8	1.8
10,000 or more	2.5	2.5	0.9	1.8	1.8

^{*}Counts by specific disability categories are unknown.



Table 8a.—Standard errors of the percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities in 1996-97 or 1997-98 indicating the basis for their counts of students with disabilities, by institutional characteristics

Institutional characteristic	Only students to whom services/ accommodations were provided	Students that provided verification of their disabilities, regardless of whether services/ accommodations were provided	Students that identified themselves to your office as having a disability, regardless of whether disabilities were verified or services/ accommodations were provided	Students that have been reported to your office as having identified themselves as having a disability, regardless of whether your office had any contact with them
All institutions	1.3	1.7	1.8	1.3
All Histitutions	1.5	1.7	1.6	1.3
Institutional type				
Public 2-year	3.2	2.7	2.8	2.3
Private 2-year	4.0	4.4	5.5	4.6
Public 4-year	2.9	3.5	1.9	1.1
Private 4-year	2.9	3.5	2.9	2.3
Geographic region				
Northeast	3.9	2.8	3.5	2.6
Southeast	3.5	3.8	4.1	1.9
Central	3.6	4.0	3.1	2.0
West	2.5	2.6	3.1	3.0
Size of institution				
Less than 3,000	1.8	2.4	2.6	1.8
3,000 to 9,999	2.6	2.4	1.8	1.3
10,000 or more	1.8	2.3	1.2	1.0



Table 9a.—Standard errors of the percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities in 1996-97 or 1997-98 that require verification of student disabilities, and what those institutions accept as verification, by institutional characteristics

		nat those in		Accepted as	verification*		
Institutional characteristic	Require verification	Medical evaluation/ statement	Psychological evaluation/ statement	Vocational rehabilitation agency evaluation	Testing or formal evaluation by your institution's disability support services office or coordinator	Informal evaluation or determination by your institution's disability support services office or coordinator	Other
All institutions	1.4	0.8	0.7	1.6	1.5	2.2	1.4
Institutional type							
Public 2-year	2.1	1.9	1.8	2.2	2.8	3.8	2.3
Private 2-year	5.1	6.0	7.4	6.0	4.6	6.5	5.0
Public 4-year	0.9	0.5		2.6	2.2	1.9	1.9
Private 4-year	2.4	0.9	1.6	3.6	2.5	2.5	2.9
Geographic region							
Northeast	3.4	1.9	2.0	3.5	2.3	3.7	2.6
Southeast	2.7	2.2	2.4	3.6	3.1	4.4	2.3
Central	3.4	2.4	2.5	3.8	3.8	3.3	2.6
West	3.1	1.9	2.7	2.8	3.1	3.5	3.2
Size of institution							
Less than 3,000	2.2	1.2	1.2	2.3	2.2	3.5	2.2
3,000 to 9,999	0.9	0.6	0.6	2.0	2.3	2.7	1.7
10,000 or more	0.7		0.3	1.8	1.4	1.6	1.1

⁻Estimate of standard error is not derived because it is based on a statistic estimated at 100 percent.



^{*}Estimates based on those institutions that require verification of student disabilities.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.

Table 10a.—Standard errors of the percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities that provided various services or accommodations to students with disabilities during 1996-97 or 1997-98, by institutional characteristics

Sign Oral Adaptive Readers, **Paratransit** Tutors to language Independent Institutional equipment interpreters/ classroom for on-Textbooks Personal assist with interpreters/ living skills characteristic transand notetakers. campus attendants on tape ongoing transtraining literators technology or scribes mobility coursework literators All institutions 1.7 1.4 1.8 1.4 0.9 1.0 0.7 1.7 1.3 Institutional type Public 2-year..... 3.9 2.9 2.7 2.4 1.4 2.2 1.9 2.6 2.2 Private 2-year 3.3 0.2 5.7 4.7 2.1 3.0 0.2 3.1 5.5 Public 4-year..... 2.5 2.7 2.4 1.8 2.0 2.0 1.2 1.8 2.3 Private 4-year 2.4 1.4 2.9 2.7 1.6 2.0 0.6 2.7 2.9 Geographic region Northeast 3.8 2.0 4.2 2.9 1.9 2.0 0.6 4.0 2.9 Southeast 3.5 2.3 4.1 3.1 1.7 1.6 1.7 4.4 2.6 Central 3.4 3.9 2.5 3.4 1.8 2.7 1.4 4.2 3.4 West..... 3.2 2.9 4.5 4.3 2.1 2.3 1.4 4.2 4.4 Size of institution Less than 3,000 2.5 1.7 2.5 1.9 0.9 1.5 1.0 2.1 1.8 3,000 to 9,999 2.1 2.3 1.9 1.3 2.2 1.4 1.1 1.7 1.7 10,000 or more..... 2.0 0.8 0.6 0.2 1.8 0.8 1.2 0.7 1.0



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Table 10a.—Standard errors of the percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities that provided various services or accommodations to students with disabilities during 1996-97 or 1997-98, by institutional characteristics—continued

Institutional characteristic	Alternative exam formats or additional time	Course substitution or waiver	Adaptive physical education courses or sports	Registration assistance or priority class registration	Special orientation	Disability resource handbook	Special career or placement services targeted for disabled students	Disability benefits counseling	Other
All institutions	1.0	1.8	1.2	1.7	1.9	1.3	1.4	1.5	1.1
Institutional type									
Public 2-year	1.7	3.6	2.5	2.8	3.3	2.1	2.7	3.4	2.2
Private 2-year	5.2	4.3	2.8	5.3	3.4	2.2	4.3	5.1	3.2
Public 4-year		2.5	2.7	1.3	2.5	2.0	2.7	2.3	2.1
Private 4-year	2.1	2.6	2.3	2.7	2.7	1.7	1.8	2.1	2.8
Geographic region									
Northeast	2.5	3.4	2.5	3.0	4.3	1.9	2.2	2.5	2.8
Southeast	2.6	3.1	2.6	3.5	3.4	2.1	3.1	3.4	2.9
Central	3.1	3.5	2.6	3.7	3.2	2.3	2.6	2.3	2.8
West	2.9	2.8	2.6	4.0	2.5	2.6	2.7	2.5	2.7
Size of institution									
Less than 3,000	1.5	2.2	1.6	2.3	2.6	1.6	1.8	2.1	1.4
3,000 to 9,999	. 0.8	2.6	2.4	1.7	2.3	2.3	3.1	2.1	2.7
10,000 or more	. 	1.1	1.6	0.8	2.4	1.5	2.2	1.4	1.4

⁻⁻Estimate of standard error is not derived because it is based on a statistic estimated at 100 percent.



Table 11a.—Standard errors of the percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities in 1996-97 or 1997-98 where the person or office responsible for providing support services to students with disabilities works, either formally or informally, with the state vocational rehabilitation agency regarding students with disabilities, by institutional characteristics

Institutional characteristic	Work with state vocational rehabilitation agency
All institutions	1.4
nstitutional type	
Public 2-year	1.4
Private 2-year	6.6
Public 4-year	2.2
Private 4-year	2.5
eographic region	
Northeast	3.5
Southeast	3.7
Central	* 3.3
West	3.4
Size of institution	
Less than 3,000	2.0
3,000 to 9,999	1.6
10,000 or more	. 0.8



Table 12a.—Standard errors of the percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities in 1996-97 or 1997-98 with an institution-wide formal planning process for the purchase and implementation of new technologies, and whether the planning process explicitly considers the needs of students with disabilities, or requests input from the disability support services office or coordinator, by institutional characteristics

		The formal planning process:*						
Institutional characteristic	Have an institution-wide formal planning process	Explicitly considers the needs of students with disabilities	Requests input from the disability support services office or coordinator					
All institutions	1.6	2.9	2.8					
Institutional type								
Public 2-year	3.3	3.7	4.0					
Private 2-year	5.5	7.3	8.5					
Public 4-year	2.4	3.6	3.6					
Private 4-year	3.6	4.3	4.6					
Geographic region								
Northeast	3.7	5.3	4.9					
Southeast	3.2	4.2	4.6					
Central	3.6	3.9	4.4					
West	3.2	5.8	4.8					
Size of institution								
Less than 3,000	2.2	4.3	4.1					
3,000 to 9,999	2.8	3.2	3.4					
10,000 or more	1.9	1.9	2.0					

^{*}Estimates based on those institutions that have an institution-wide formal planning process for the purchase and implementation of new technologies.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.

Table 13a.—Standard errors of the percent of 2-year and 4-year postsecondary education institutions with various kinds of education materials or activities designed to assist faculty and staff in working with students with disabilities, by whether the institution enrolled students with disabilities in 1996-97 or 1997-98

Enrollment of students with disabilities	Faculty/ staff handbook	Annual mailings to faculty/staff	Workshops and presentations to faculty groups	One-on-one discussions with faculty/ staff who request information or assistance	Information resources (e.g., books, videotapes) available for faculty/staff use	Other
All institutions	1.7	1.4	2.3	1.3	1.8	0.9
Institutions that enrolled students with disabilities in 1996-97 or 1997-98	1.8	1.8	2.2	1.2	1.8	1.1
Institutions that did not enroll students with disabilities in 1996-97 or 1997-98	3.3	2.2	4.0	4.0	4.1	1.3



Table 14a.—Standard errors of the percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities in 1996-97 or 1997-98 that have various kinds of education materials or activities designed to assist faculty and staff in working with students with disabilities, by institutional characteristics

Institutional characteristic	Faculty/ staff handbook	Annual mailings to faculty/staff	Workshops and presentations to faculty groups	One-on-one discussions with faculty/ staff who request information or assistance	Information resources (e.g., books, videotapes) available for faculty/staff use	Other
All institutions	1.8	1.8	2.2	1.2	1.8	1.1
Institutional type						-
Public 2-year	3.7	2.8	2.6	1.0	2.9	1.6
Private 2-year	5.5	3.5	6.1	5.7	7.0	1.7
Public 4-year	2.4	3.9	2.5	0.9	2.6	1.9
Private 4-year	3.5	3.1	4.3	1.9	3.0	2.5
Geographic region						
Northeast	4.1	3.6	3.7	2.0	4.4	2.5
Southeast	4.5	3.3	4.1	2.0	3.2	2.6
Central	2.7	3.4	4.5	2.0	3.3	1.8
West	3.2	3.2	4.5	2.9	3.3	2.0
Size of institution			•			
Less than 3,000	2.7	2.4	3.2	1.7	2.6	1.4
3,000 to 9,999	2.8	3.4	1.5	1.1	1.8	2.3
10,000 or more	1.5	1.7	0.9	0.3	1.7	2.3



Table 15a.—Standard errors of the percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities in 1996-97 or 1997-98 that have developed special outreach or recruitment materials or activities designed specifically to recruit students with disabilities, and the audiences for those materials and activities, by institutional characteristics

		Audiences for materials and activities*									
Institutional characteristic	Developed materials or activities	High school counselors and/or transition coordinators	Other postsecondary institutions	Businesses/ employers	Community and civic organizations	State vocational rehabilitation agencies	Other types of vocational rehabilitation agencies	Other			
All institutions	1.6	1.8	3.8	2.8	3.2	2.6	3.7	2.0			
Institutional type											
Public 2-year	3.3	1.9	4.9	4.6	5.2	3.6	5.0	3.0			
Private 2-year	2.6	(#)	(#)	(#)	(#)	(#)	(#)	(#)			
Public 4-year	2.8	3.3	3.7	4.0	4.I	4.4	3.3	2.8			
Private 4-year	2.0	(#)	(#)	(#)	(#)	(#)	(#)	(#)			
Geographic region											
Northeast	2.5	2.6	6.9	4.3	6.3	5.7	7.1	3.1			
Southeast	2.8	4.0	6.0	7.5	6.9	5.6	8.3	3.4			
Central	3.3	5.9	5.2	6.8	6.0	6.2	5.0	4.3			
West	2.5	3.3	5.4	3.1	5.6	5.8	5.6	3.3			
Size of institution											
Less than 3,000	2.2	4.0	8.5	6.1	7.0	6.1	7.6	3.3			
3,000 to 9,999	2.5	1.3	3.4	4.8	4.0	2.6	4.6	3.5			
10,000 or more	1.8	0.7	2.1	2.3	2.5	1.8	2.0	1.6			

^{*}Estimates based on those institutions that have developed special outreach or recruitment materials or activities designed specifically to recruit students with disabilities.



^(#) Too few cases for a reliable estimate.

Table 16a.—Standard errors of the percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities in 1996-97 or 1997-98 indicating how they maintain their records about students with disabilities, by institutional characteristics

CHAI AC	teristics				
Institutional characteristic	Computerized database as part of the general student record system, accessible to various institutional offices		Separate computerized database maintained by the disability support services office/coordinator	Only paper files maintained by the disability support services office/ coordinator	No formal records are maintained about students with disabilities
All institutions	1.1	0.9	1.5	1.9	1.1
Institutional type					
Public 2-year	2.4	2.5	2.6	3.3	1.3
Private 2-year	3.7	0.9	2.6	4.9	5.6
Public 4-year	1.4	1.5	2.6	3.1	1.6
Private 4-year	2.2	0.7	2.1	2.8	1.9
Geographic region					
Northeast	2.2	1.9	2.7	3.0	3.6
Southeast	2.3	1.8	2.4	3.2	2.4
Central	1.9	0.8	2.6	4.2	2.9
West	2.5	1.5	2.5	4.0	2.1
Size of institution					
Less than 3,000	1.4	1.2	1.9	2.8	1.6
3,000 to 9,999	1.9	1.7	2.8	2.4	0.2
10,000 or more	1.4	1.3	1.4	2.1	

⁻⁻ Estimate of standard error is not derived because it is based on a statistic estimated at zero percent.



Table 17a.—Standard errors of the percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities in 1996-97 or 1997-98 indicating that their records about students with disabilities currently contain selected variables, and if not, how easily the variables can be added or merged to the records, by institutional characteristics

Institutional	Sex			R	ace/ethnici	ity	Age or date of birth			Attendance status (full or part time)		
characteristic		_ Can be	added:1		Can be	added:1		Can be	added:1		Can be	added:1
	On record	Easily	With difficulty	On record	Easily	With difficulty	On record	Easily	With difficulty	On record	Easily	With difficult
All institutions	1.8	3.5	3.5	1.9	2.6	2.7	2.1	2.7	2.8	1.6	2.4	2.2
Institutional type												
Public 2-year	3.0	4.5	4.2	2.9	4.1	3.7	3.2	4.4	4.3	1.8	4.6	4.2
Private 2-year	6.7	(#)	(#)	7.8	(#)	(#)	6.8	(#)	(#)	5.0	(#)	(#)
Public 4-year	2.6	5.3	5.3	2.9	4.3	3.7	2.2	4.5	4.6	2.4	3.6	3.8
Private 4-year	3.4	5.9	6.0	3.1	3.1	3.6	3.9	5.6	5.7	3.2	5.4	4.1
Geographic region												
Northeast	3.4	6.4	6.2	4.0	5.4	5.6	4.5	5.3	4.9	3.7	5.2	5.0
Southeast	3.2	5.4	5.4	4.2	4.6	4.1	3.6	7.4	7.0	3.4	3.7	3.2
Central	4.0	6.3	6.2	4.6	6.7	6.4	3.5	4.6	4.6	3.6	5.7	5.5
West	3.9	7.3	7.3	4.0	4.7	4.0	3.6	6.9	7.0	3.9	4.8	4.8
Size of institution												
Less than 3,000	2.6	4.9	5.0	2.9	3.7	3.9	3.0	3.9	4.2	2.4	3.7	2.9
3,000 to 9,999	2.8	4.8	4.2	2.5	3.9	3.7	2.7	3.7	3.3	2.2	4.2	4.2
10,000 or more	1.9	2.4	2.4	1.5	2.7	2.4	1.9	2.3	2.6	1.5	2.7	2.7



Table 17a.—Standard errors of the percent of 2-year and 4-year postsecondary education institutions enrolling students with disabilities in 1996-97 or 1997-98 indicating that their records about students with disabilities currently contain selected variables, and if not, how easily the variables can be added or merged to the records, by institutional characteristics—continued

	Level (undergraduate/ graduate) ²			Whether student receives financial aid			Major field of study/program			Certificates or degrees awarded by the institution		
Institutional			added:1			added:1	On record	Can be added:1				added:1
characteristic	On record	Easily	With difficulty	On record	Easily	With difficulty		Easily	With difficulty	On record	Easily	With difficulty
All institutions	2.4	4.0	3.9	1.9	2.3	1.9	1.7	3.1	3.0	1.8	2.2	2.4
Institutional type												
Public 2-year				2.4	3.8	3.8	2.4	6.4	6.0	2.8	4.8	4.5
Private 2-year				6.3	(#)	(#)	4.5	(#)	(#)	5.6	(#)	(#)
Public 4-year	2.4	5.1	5.3	2.4	2.4	3.0	3.0	4.3	4.3	3.1	2.8	2.7
Private 4-year	3.9	5.6	5.2	3.2	4.0	2.5	3.5	5.0	3.8	2.9	3.7	3.3
Geographic region												
Northeast	4.7	9.8	9.4	2.7	3.9	4.1	3.5	6.7	6.5	3.8	4.8	4.7
Southeast	3.3	12.3	12.3	3.9	3.5	2.7	3.4	5.0	4.2	3.5	4.0	3.4
Central	5.9	8.7	8.7	4.5	4.3	4.3	3.4	4.5	4.4	4.7	4.9	4.8
West	7.4	10.5	6.8	5.1	4.3	3.3	3.9	5.9	6.5	3.7	3.8	4.2
Size of institution												
Less than 3,000	5.1	7.0	6.2	2.9	3.7	2.9	2.4	4.2	3.8	2.5	3.0	3.5
3,000 to 9,999		6.8	7.5	2.0	2.4	2.6	2.1	4.9	4.6	2.9	4.1	3.6
10.000 or more	1.6	4.9	4.9	1.8	2.5	2.5	2.0	2.9	2.9	1.8	2.1	2.2

⁻⁻ Does not apply to 2-year institutions.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Students with Disabilities at Postsecondary Education Institutions, 1998.

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^(#) Too few cases for a reliable estimate.

¹Estimates based on those institutions indicating that their records about students with disabilities do not currently contain that variable.

²Estimates based only on those institutions that have both undergraduate and graduate level students.

<u>Item</u>	Estimate	Standard erro
Figure 1: Percent of 2-year and 4-year postsecondary education institutions that require erification of student disabilities, by whether the institution enrolled students with lisabilities in 1996-97 or 1997-98		
all institutions	72	2.1
stitutions that enrolled students with disabilities	84	1.4
stitutions that did not enroll students with disabilities	40	4.5
igure 2: Percent of 2-year and 4-year postsecondary education institutions where the erson or office responsible for providing support services to students with disabilities orks, either formally or informally, with the state vocational rehabilitation agency egarding students with disabilities, by whether the institution enrolled students with isabilities in 1996-97 or 1997-98		
Il institutions	60	1.6
stitutions that enrolled students with disabilities	73	1.4
stitutions that did not enroll students with disabilities.	73 27	3.3
igure 3: Percent of 2-year and 4-year postsecondary institutions with an institution-wide permal planning process for the purchase and implementation of new technologies, and whether the planning process explicitly considers the needs of students with disabilities, or equests input from the disability support services office or coordinator, by whether the institution enrolled students with disabilities in 1996-97or 1997-98		
ave planning process: all institutions	54	1.8
ave planning process: enrolled disabled students	63	1.6
ave planning process: did not enroll disabled students	31	3.9
ocess considers the needs of disabled students: all institutions	52	2.8
ocess considers the needs of disabled students: enrolled disabled students	55	2.9
rocess considers the needs of disabled students: did not enroll disabled students	36	6.4
rocess requests input: all institutions	54	2.9
rocess requests input: enrolled disabled students	59	2.8
rocess requests input: did not enroll disabled students	32	6.8
igure 4: Percent of 2-year and 4-year postsecondary education institutions that have eveloped special outreach or recruitment materials or activities designed specifically to ecruit students with disabilities, by whether the institution enrolled students with isabilities in 1996-97 or 1997-98		
Il institutions	20	1.5
stitutions that enrolled students with disabilities	27	1.6
stitutions that did not enroll students with disabilities	3	1.5
hapter 2, section on type of counts reported about students with disabilities		
stitution kept duplicated counts by specific disabilities and an unduplicated count of the total	•	
umber of students with disabilities	3	0.4
hapter 4, section on provision of support services or accommodations		
stitution provided at least one support service or accommodation	98	0.6
hapter 5, section on education materials and activities for faculty and staff		
stitution provided at least one kind of educational material or activity for faculty and staff: all institutions	84	1.5
istitution provided at least one kind of educational material or activity for faculty and staff:	U-7	1.3
institutions that enrolled students with disabilities	95	1.0
OURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Educ	eation Ouick Inform	nation System

Appendix B Survey Questionnaire



U.S. DEPARTMENT OF EDUCATION NATIONAL CENTER FOR EDUCATION STATISTICS WASHINGTON, D.C. 20208-5651

STUDENTS WITH DISABILITIES AT POSTSECONDARY EDUCATION INSTITUTIONS

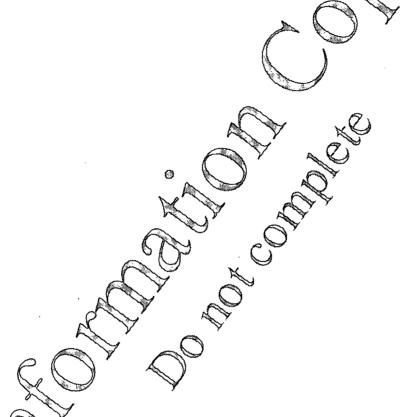
O.M.B. No.: 1850-0733 EXPIRATION DATE: 07/99

FORM APPROVED

1

POSTSECONDARY EDUCATION QUICK INFORMATION SYSTEM

This survey is authorized by law (P.L. 103-382). While participation in this survey is voluntary, your cooperation is critical to make the results of this survey comprehensive, accurate, and timely.



IF ABOVE INSTITUTION INFORMATION IS INCORRECT, PLEASE UPDATE DIRECTLY ON LABEL.

Name of Person Comp	leting This Form:		 	
Title/Position:		 		
Telephone Number:				

THANK YOU. PLEASE KEEP A COPY OF THIS SURVEY FOR YOUR RECORDS.

RETURN COMPLETED FORM TO:

WESTAT, INC. 1650 Research Boulevard Rockville, Maryland 20850 ATTN: Lewis, 900432 IF YOU HAVE ANY QUESTIONS, CALL:

Laurie Lewis at Westat 800-937-8281, Ext. 8284 or 301-251-8284

Fax: 800-254-0984

E-mail: lewisl1@westat.com

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PEQIS Form No.8, 01/98



1.	During 1996-97 or the current school year, have there been any students enrolled at your institution who identified themselves to your institution as having a disability?
	Yes
2.	Please provide the number of students enrolled at your institution in 1996-97 (12-month academic year) who identified themselves to your institution as having a disability. Please report the number of students by specific disabilities, and then the total number with any disability. Please provide counts for 1996-97 if possible. If your institution can only provide counts for the current academic period, please check here and provide the current counts below.
	a. Hearing impairment (i.e., deaf or hard of hearing) b. Blind or visual impairment that cannot be corrected by wearing glasses c. Speech or language impairment d. Mobility/orthopedic impairment. e. Specific learning disabilities, including attention deficit disorder f. Health impairment/problem
	g. Mental illness/emotional disturbance
	h. Other (specify) i. TOTAL WITH ANY DISABILITY
	TOTAL WITTANT DISABILITY
	stions 3 through 7 ask about the counts of students with disabilities you provided in question 2; and about your utional records and reporting about students with disabilities.
_	MY Y
3.	Which one of the following best describes the counts of the number of students by specific disabilities that you provided in question 2? (Circle only one number)
	These counts are unduplicated. Each student with a disability is counted only once (i.e., students are counted by their only or their primary disability)
	These counts are duplicated. Each student with a disability is counted by each disability he or she has or each disability for which services are provided (i.e., students with multiple disabilities are counted multiple times)
	These counts are (please describe)
4.	Which one of the following best describes the total number of students with any disability that you provided in question 2? (Circle only one number.)
	This is an unduplicated total of the number of students with any disability. Each student with any disability is counted only once, regardless of the number of disabilities he or she has
	This is a duplicated sum of the number of disabilities. Students with more than one disability are counted for each disability he or she has or each disability for which services are provided
	This total is (please describe):
5.	Which one of the following best describes which students with disabilities are represented in the counts that you provided in question 2? (Circle the first option that applies.)
	Only students to whom services/accommodations were provided
	Students that provided verification of their disabilities, regardless of whether services/ accommodations were provided
	Students that identified themselves to your office as having a disability, regardless of whether disabilities were verified or services/accommodations were provided
	Students that have been reported to your office as having identified themselves as having a disability, regardless of whether your office had any contact with them. This includes information provided to your office about disabled students by other offices (e.g., the admissions or registrar's office), even if your office had no contact with them
	Other (please describe):5
O C	2 (h.:

6.	Which one of the following best describes how the records about counts provided in question 2 are maintained by your institution? (6)	t students witl Circle only one	n disabilitie number.)	s used to pre	pare the
	Records are maintained in a computerized database as part of the are accessible to various institutional offices, such as the registrar of	general studen or the Dean of	t record sy Students	stem, and	1
	Records are maintained in a computerized database as part of the are accessible only to the office or person responsible for providing	general studen support servic	t record sy	stem, but nts with	
	disabilities (e.g., access to the records on students with disabilities	A 5000	382 \		2
	Records are maintained in a separate computerized database by the providing support services to students with disabilities		~_/	• • • • • • • • • • • • • • • • • • • •	3
	Records are maintained only in paper files by the office or person re services to students with disabilities			upport	4
	No formal records are maintained about students with disabilities.				5
	Other (please describe):				6
	For each of the variables below, indicate in the first column whe				
	used for question 2 currently contain that variable. If the records the second column whether the variable: (1) can be obtained for records or databases and easily added/merged to the records added/merged to the records, but it would be a difficult and/ added/merged to the records. If your institution does not maintain (i.e., you circled option 5 in question 6), please check here. and Curre	rom intake qui for disabled st or time-consu or formal recor	estionnaire udents; (2) ming proce ds about si n 8.	s or other ins can be obtai ess; or (3) ca	stitutiona ined and annot be isabilitie
			Yes,	Yes, with	
	Yes	No	easily	difficulty	No
	a. Sex	2	1	2	3
	b Race/ethnicity 1	2	1	2	3
	c. Age or date of birth	2	1	2	3
	d. Attendance status (full- or part-time) 1	2	1	2	3
	e. Level (undergraduate/graduate) 1	2	1	2	3
	f. Whether student receives financial aid	2	1	2	3
	g. Major field of study/program	2 .	1 1	2	3
	h. Certificates or degrees awarded by the institution 1	2	1	2	3
				da da Diagna	:!: 4
8.	Listed below are special support services or accommodations d	esigned for di	sabled stud	ients. Piease	: Indicat
	whether your institution has provided that service or accommodation	on to a student	WILLI GISAD	illides during 18	9 9 0-97 C
	the current school year (Circle one number on each line.)			Yes	No
	a. Sign language interpreters/transliterators				2
	a. Sign language interpreters/transliteratorsb. Oral interpreters/transliterators			1	2
	and the second s				2
					2
	- 1. TO				2
					2
	to the control of the				2
		***************************************		1	2
					2
	i. Tutors to assist with ongoing coursework				2
	j. Alternative exam formats or additional time				
	k. Course substitution or waiver				2
	Adaptive physical education courses or sports				2
	m. Registration assistance or priority class registration				2
	n. Special orientation				2
	o. Disability resource handbook		••••••	1	2
	p. Special career or placement services targeted for disabled stud	ients	• .18	1	2
	q. Disability benefits counseling (e.g., VR services, SSI, SSDI, Me	edicare, Medica	aid)		2
4	r Other (specify)			1	2
FR	B-5 7	A			

		Yes	No
	a. Medical evaluation/statement	1	2
	b. Psychological evaluation/statement	1	2
	c. Vocational rehabilitation agency evaluation	1	2
	d. Testing or formal evaluation by your institution's disability support services office or coordinator.	1	2
	e. Informal evaluation or determination by your institution's disability support services office	'	_
	or coordinator	1	2
	f. Other (specify)	· ·	2 2
		1	2
10.	Does the person or office responsible for providing support services to students with disability formally or informally, with the state vocational rehabilitation agency regarding students with disability	es wor	k, eithe
	Yes 1 No 2		
11.	Which of the following kinds of education materials or activities, if any, does your institution provide	e for fac	culty and
	staff designed to assist them in working with students with disabilities? (Circle one) number on each	line.)	•
	S. S	Yes	Мо
	a. Faculty/staff handbook b. Annual mailings to faculty/staff c. Workshops and presentations to faculty groups		2
	b. Annual mailings to faculty/staff.	•	2
	c. Workshops and presentations to faculty groups		2
	d. One-on-one discussions with faculty/staff who request information or assistance	4	
	e. Information resources (e.g., books, videotapes) available for faculty/staff use	1	2
	f. Other (specify)	7	2
	f. Other (specify)	1	2
12.	Has your institution developed any special outreach or recruitment materials or activities designe recruit disabled students? Yes	d speci	fically to
12.	Yes		
	Yes	activitie	es bee
	Yes	activition Yes	es bee
	Yes	activition Yes	es bee No 2
	Yes	activition Yes	es bee No 2 2
	Yes	activitie Yes 1 1 1	es bee No 2 2 2
	Yes	activitie Yes 1 1 1	es beer No 2 2 2 2 2
	Yes	activitie Yes 1 1 1 1	es beer No 2 2 2 2 2 2
	Yes	activitie Yes 1 1 1 1	es beer No 2 2 2 2 2 2 2
	Yes	Yes 1 1 1 1 1 1 plemen	es beer No 2 2 2 2 2 2 2 2 tation o
13.	Yes	Yes 1 1 1 1 1 1 plemen	es beer No 2 2 2 2 2 2 2 tation o
13.	Yes	Yes 1 1 1 1 1 1 plemen technol	es beer No 2 2 2 2 2 2 2 tation o
13.	Yes	Yes 1 1 1 1 1 1 plemen technol	es beer No 2 2 2 2 2 2 2 tation o
13.	Yes	Yes 1 1 1 1 1 1 plemen technol	es beer No 2 2 2 2 2 2 2 tation o
13.	Yes	activitie Yes 1 1 1 1 1 technol institutio you.)	es beer No 2 2 2 2 2 2 tation o

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